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PROCEEDINGS

WORKSHOP FOR THERAPEUTIC RECREATION EDUCATORS

St. Louis, Missouri
February 1974

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AMERICAN FOUNDATION FOR THE BLIND, INC.
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PROCEEDINGS OF WORKSHOP
FOR
THERAPEUTIC RECREATION EDUCATORS

St. Louis, Missouri
February 24-27, 1974

American Foundation for the Blind, Inc.
15 West 16th Street
New York, New York 10011

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INTRODUCTION

In March 1973, the American Foundation for the Blind, in cooperation with the National Therapeutic Recreation Society of the National Recreation and Park Association, sponsored a workshop of recreation personnel to explore the potential for employment and utilization of recreation assistants in expanding opportunities for blind and visually impaired persons to participate in on-going recreation programs and activities with their sighted peers.

As a result of the group discussions, there was general agreement that there was a basic core of information about blindness, needs and abilities of blind persons, resources and equipment available, etc., that should be included within the content of basic therapeutic recreation education courses at any level.

It was recommended that the American Foundation for the Blind focus its initial training efforts on people already involved in recreation and, in cooperation with the National Therapeutic Recreation Society, this second workshop was planned for the purpose of developing guidelines, outlining content, sources of materials, resources, etc. for use in college recreation courses or in-service training. Dr. Doris Berryman, Mr. Gerald Hitzhusen, and Mr. David Park assisted AFB staff in planning.

Following the keynote address of Dr. Edith Ball, a full day was devoted to presentation of basic information about blindness and visual impairment, losses and techniques of working with blind persons, and considerations for recreators in working with visually impaired people of different age groups. The following day-and-a-half was devoted to discussion and identification of information that should be included in the preparatory course work of recreation personnel. There was consensus that this information could be included within the structure of courses currently offered and several suggestions and recommendations were made concerning dissemination and further development of materials.

This was truly a work-oriented meeting and the report can in no way reflect the enthusiasm, concentration, commitment and involvement of the participants in the demonstrations, question and answer periods and discussions. It is hoped that the material presented in the body of the report and the appendix will provide guidelines for the development of instructional modules and create awareness of the needs and abilities of blind persons in both

practicing and student recreation personnel and motivate them to include those visually impaired persons who desire to do so in on-going recreation activities.

Our sincere thanks to the members of the planning committee, speakers and participants for their contribution to the success of the workshop.

Beth J. Phillips, Workshop Coordinator
Specialist in Training
American Foundation for the Blind

WORKSHOP FOR THERAPEUTIC RECREATION EDUCATORS

Chase-Park Plaza Hotel
St. Louis, Missouri

February 24-27, 1974

PROGRAM

Sunday, February 24th

5:30 - 7:00 p.m. Reception Coach Room

7:00 - Dinner Park Room

Presiding: Beth J. Phillips
AFB Specialist in Training

Welcome: William F. Gallagher, Director
AFB Program Planning Department

David C. Park, Executive Secretary
National Therapeutic Recreation
Society

Address: "Mainstreaming Recreation for Blind People"

Edith L. Ball, Ed. D., Adjunct Professor
George Washington University
Professor Emeritus, New York University

Monday, February 25th

9:00 - 12:00 a.m. General Session Colonial Room

Presiding: Beth J. Phillips

"Not Without Sight".....Film

"Blindness - What It Does and How To Live With It"
William F. Gallagher

"What Do You Do When You See a Blind Person?"....Film

"Helping the Blind Person Achieve Independence"
James Kimbrough, Chairman
Orientation & Mobility Department
Greater Pittsburgh Guild for
the Blind

2:00 - 5:00 p.m. General Session Colonial Room

Presiding: Doris L. Berryman, Ph. D.
New York University

"Meeting the Developmental and Activity Needs of:

... The Pre-School Child" Mrs. Virginia Murray, Director
Delta Gamma Foundation for
Visually Handicapped Children

... Children and Youth" Ronald Gacsco, Recreation Director
Indiana School for the Blind

... Older Adults" Mrs. Edith Shapiro, Instructor
Suffolk County Community College

"Common Visual Losses - Causes and Considerations"
Robert C. Drews, M.D.
Board Member
St. Louis Society for the Blind

Tuesday, February 26th

9:00 - 12:00 a.m. Discussion Groups

Group I CHILDREN English Room
Leader...Jean Mundy, Ed. D.
Florida State University

Group II YOUTH & YOUNG ADULTS Embassy Room
Leader...Carol Peterson, Ed. D.
Michigan State University

Group III OLDER PERSONS Colonial Room
Leader...Fred Humphrey, Ed. D.
Temple University

2:00 - 5:00 p.m. Discussion Groups (continued)

Wednesday, February 27th

9:00 - 11:00 a.m. General Session Park Room

Presiding: Marion V. Wurster, Director
AFB Program Development Division

Group Reports, Recommendations and Plans for Action
General Discussion

11:00 a.m. Adjournment

Mainstreaming Recreation for Blind People

Edith L. Ball, Ed. D., Professor Emeritus, New York University
Adjunct Professor, George Washington
University

Mainstreaming can have a different meaning for different people. For some it might conjure up a picture of a car maneuvering into the mainstream of freeway traffic, avoiding a dozen hazards in the process. For another, it brings to mind the many little streams that feed into a mighty river which, in turn, is the major source of economic stability, food and pleasure for the people of a whole nation.

It is in the latter context that we need to consider recreation for blind people. There are many factors, some of vital importance, others only tangentially affecting the problems of recreation services for blind, but each making its own contribution to the quality of service that is provided.

One major factor that should concern us all is the attitude of the sighted public, and that includes recreators, toward blind people. In general, people view those who are disabled and/or handicapped as less than a person. Helen Keller's oft quoted statement that "not blindness, but the attitude of the seeing to the blind is the hardest burden to bear" ¹, says this pointedly. Down through the ages the handicapped person was considered to be "possessed by demons", unfit for society and, therefore, to be disposed of or, at the other extreme, as one who was feared because he was thought to have supernatural powers. Today, and particularly in this country, a more realistic acceptance of handicapped people has been achieved, but much still remains to be done.

While it is true that certain specialized techniques need to be learned to function as a recreation leader of handicapped people, there is no reason why every recreator can not learn those techniques and, therefore, help the person who is handicapped to become part of the mainstream of community recreation. It is recognized that certain conditions will require segregated services or at certain stages of a handicapping condition that the individual will need specialized services. However, a blind person as well as other disabled people, needs more than anything to be helped to achieve a maximum of independence at the same time that they face the reality that they are different than fully functioning people.

Ralph Meng, M.D.² stated, "To make therapeutic use of himself it isn't necessary for the professional recreator to know a great deal about sickness. Nor is it necessary that he be a psychoanalytically oriented psycho-therapist." The job of the recreator is to help the individual to participate in a variety

of experiences that provide that person with an opportunity to meet certain needs and interests; this is simply saying we look at each blind person as an individual, not as "the blind", which immediately stereotypes him and consigns him to such traditional activities as broom making or the shuffling pencil peddler with a cup and a cane. The first major factor then in mainstreaming recreation for blind people is to help the recreation leader in every setting to develop positive and rational attitudes toward blind people. A title of an article about older people in Recreation magazine states, "They Are People - You Know."³ So the blind are people. As recreators we have the same responsibility, to provide services for blind people as for all other people. Blind people have the same basic needs as other people but may have certain needs which may be greater because of their handicap. Case⁴ quotes five major areas of behavior that may be changed because of blindness. They are:

- "1. Personality adjustment characterized by feelings of hopelessness and resulting in over-compensation and social withdrawal with excessive phantasy manifestations.
2. Mobility restrictions in relation to the special environment resulting in physical fear of pain when in an unknown area.
3. Space perception in relation to general and specific orientation.
4. Communication - verbal, non-verbal.
5. Creativity".

Recreators must understand these differing needs and be able to cope with them.

To do this, every recreator should have an exposure and association with blind people. This should not be mere tokenism but an in-depth exposure, even though it might be of short duration. This can be achieved through pre-service professional preparation or it can be done through in-service education. If we could achieve an ideal in our society this would not be necessary at a professional preparation level for every child from his earliest years would have an opportunity to work and play with handicapped children. However, that millenium is in the distant future, and we must find ways to change attitudes of recreators toward blind people.

Closely allied to the attitude of recreators toward blind people, growing out of the stereotyping process, is the conviction that only certain activities are possible for blind people. The full scope of activities should be considered possible with only certain things thought of as rare exceptions to the general princi-

ple that blind people may participate in most activities. No, a blind person probably will not be very successful at batting a ball, but he can play golf, bowl, swim, shoot archery, ski or water ski. In certain of these activities he may need special help or certain devices to make the activity possible, but that is the recreator's job to make it possible. When the blind person feels more comfortable learning a skill with people like himself, it is necessary to establish a special group until the blind person is comfortable in his skill and quite able to function with the sighted. Certain skills can be learned with the sighted if adapted equipment such as braille playing cards are provided for a bridge group, thus making it possible for the blind player to learn with the sighted and later to play with sighted players.

A recreator must also recognize that certain activities present serious safety hazards for blind people. These must be carefully analyzed and precautions taken to eliminate the hazard that is present. In addition, there are some activities where certain forms of the activity may be contraindicated. An example of this would be skiing. Except under very special conditions, downhill skiing would present many serious hazards, but cross country skiing would be completely possible in the company of a sighted person.

As recreators, try to integrate blind people into sighted groups, they must recognize that one of their most difficult tasks will be to change the attitude of the group towards the blind person or persons. This will involve an understanding of the attitude and behaviors of the blind person as well as the sighted people. This entails the ability of the recreator to assess the functioning level of the blind person and his readiness for activity with the sighted. To do this, every recreator should have an understanding of blindness - not in great depth but enough to recognize that blindness, or even a visual impairment, may affect the functioning of an individual. The recreator must also understand the attitude of the sighted. Perhaps an experiment that Anne Bushart⁵ carried on with a class at the University of Wisconsin would help. In this, the sighted group became blindfold-blind and provided with two leaders to move about the campus, eat at the Union and participate in recreation. Through this they gained an awareness of the meaning of blindness, if nothing else. Perhaps this kind of simulation would be effective with other professional groups.

Not only do recreators need to recognize the scope of the program that should be made available for blind people, but also they must learn how to develop facilities that may be used by the blind. In this area we have been very smug, thinking that provisions have been made because a "scent garden" has been established. A scent garden is fine, but it is not enough.

Blind people should be able to enjoy nature trails with sighted people. The trails need to be marked in print, in braille and with recordings, or perhaps with the recordings alone, to which both sighted and blind people can listen as they walk along a path that is smooth and wide enough for two to walk side by side. Perhaps most important is to make buildings accessible and safe for blind people. Doorways without sills that would cause a blind person to stumble, a guide rail in a corridor and doors that would open manually, are a few examples of building construction that will make it easier for blind people to move about easily and safely.

In recognizing the scope of the program that should be made available to blind people, recreators must also understand the special needs of blind people for transportation. While some blind people are quite able to navigate successfully on public transportation, there are many who are fearful of moving about on the streets and in trains and buses because these represent unknown territory that can be fraught with all kinds of unseen dangers. This, then, presents the problem of how to help the blind person to get to the recreation program. Some special recreation centers for blind people spend a good part of their budget for transportation in small buses or private cars. Is this the only answer, or can recreation departments find other means of transportation to mainstream blind people into the community recreation program. Some communities now provide buses for the elderly. Can this be expanded to include blind people?

The problems related to the mainstreaming of blind people into community recreation programs are many. However, many of these problems exist because recreators, like the general public, have not considered that blind people have the right to be a part of community life. This must be changed through education of professionals in the field, making them aware of the needs and interests of blind people and how to develop programs and facilities that will permit them to function as a full-fledged member of the community. First recreators must recognize their responsibility and then they must learn something about blind people and the techniques necessary to provide satisfying programs. Perhaps, as the sighted play with the blind, both will gain an appreciation for each other, each accepted for what they are rather than for what they are not.

1. Case, Maurice. Recreation for Blind Adults, C. Thomas, Springfield, Illinois, 1966.
2. Recreation, October, 1960, p. 360, National Recreation Association, New York.
3. Cahill, Rosemary. Recreation for the Ill and Handicapped, "They Are People - You Know", April 1967, NART.
4. Case, Maurice, op cit., p. 29.
5. Bushart, Anne. "Trying on Blindness: A Learning Experience", Therapeutic Recreation Journal, NTRS, Vol. II, 1968, #3, p. 25, Arlington, Virginia.

Blindness - What It Does and How To Live With It

William F. Gallagher, Director
Program Planning Department
American Foundation for the Blind, Inc.

Many appeals for contributions sent out by agencies serving blind persons say: "Give to the such-and-such agency and help take the blind person out of the world of darkness." This is not an accurate statement for the blind person is not in the world of the dark.

We must make a distinction between this light and dark with the blind person being in the dark; the sighted person in the light. Blindness is the absence of sight and the inability to know visually what is around you. It is not a great total darkness that suddenly descends upon you and deprives you of all knowledge and common sense.

I think that this relegating of blind people into the "world of darkness" has done a great deal of harm insofar as making sighted persons feel ill at ease with their blind companions. Symbolically, we associate light with beauty, kindness and honesty; darkness has negative connotations. Perhaps, this is a throwback to the days of our childhood, when we associated ghosts and goblins with the coming of the night. We can walk by a cemetery in the light of day and never pay attention to where we are but, should we pass it at the stroke of midnight, then our ears are attuned to every little noise and our feet seem to travel twice as fast. We're afraid.

If we look at blindness and blind people in a practical way, we know that the majority of blind persons have some sight and, therefore, they do not exist in a world of total darkness. They do see some sort of light, even if it is greatly dimmed. Remember that the adventitiously blinded person did, at one time, possess sight and, even though he may be totally blind now, he can still visualize the red fire truck, the green grass, or the blue sky. On the other hand, the congenitally totally blind person cannot compare colors, shapes, or sizes with you, as he has no visual memories to fall back upon. However, neither the adventitiously or congenitally blind person is in the "dark" as to what is going on in this world; he is mentally alert and aware of the fact that you are at ease or not at ease in his company.

When we talk about communication, we immediately think of the written word and our mind quickly thinks of how we can restore this loss to the blind person through such things as braille, talking books, and tape recordings. Yet, do we ever realize that

the loss of verbal communication frequently accompanies the loss of vision? It is not unusual for a newly blinded person to isolate himself from all social gatherings because he is not comfortable in the company of sighted persons. He will give many excuses for not going out, e.g., "I have a good talking book." "There's going to be a good baseball game on.", but what he really is saying is, "I am very uncomfortable socializing and competing in conversation with sighted persons."

Perhaps, this is because somehow some sighted persons have mistakenly acquired a belief in the so-called "sixth sense" of blind people. Too often a person thinks that all he has to do is introduce himself once to a blind person and from that day on the blind person will know exactly who he is whenever or wherever they should meet. It isn't true! For example: A few years ago, on Commonwealth Avenue in Boston, a man came over to me and said, "Bill Gallagher, I haven't seen you for two years but I'll bet five dollars that you know me. I've told all my friends back home how all one has to do is to speak to you once and you will know who it is from that time onward." I looked at the man, said "Hi, how are you? What's new?" and he said "I knew you'd know me." He helped me across the street and hurried off exclaiming about how he couldn't wait to get home to tell his friends. Until this day, I haven't the least idea who he is. Blind persons also forget voices or mismatch them in the same way that sighted people do when talking on the telephone.

Therefore, many blind persons feel uneasy in social gatherings as they are either afraid that sighted persons who are not aware of their visual loss will misinterpret their reserved attitudes for that of indifference, or that those people who have met them once or twice before may expect the impossible from them. The newly blinded person is reluctant to announce to everyone that he is blind and consequently he shies away from the large social gatherings, preferring to limit his socializing to being with those persons who are already aware of his visual loss. For example: A few years ago I worked with a person who came from a well-to-do family, traveled in all the best social circles, owned a large insurance company, became blind at the age of 47. She said to me, "Mr. Gallagher, I enjoy going to the country club but I'm very tense and uneasy there. I don't seem to be able to tell people that I'm blind but I'm much more comfortable when the people around me in the cocktail lounge know it. I'm worried, many times, that someone will make a gesture; e.g., 'Would you like a cigarette' or have a facial expression that I won't respond to and they'll wonder what's wrong with me."

This tension on the part of the newly blinded person is something that we have to correct. It is more evident among older blind persons who are afraid to compete with their sighted peers in a recreational or vocational situation and among those blind persons who have not undergone any rehabilitation training.

One way in which you might begin to build a good relationship with a blind person in a recreational setting is to introduce yourself to him and, should you step away and then return, indicate that you are leaving and that you have returned. This will prevent him from "talking to the air" should you suddenly disappear from his side. It is only a small thing but an important one as your consideration for him will either help develop or destroy his self-assurance in his attempts to establish social contacts.

Beside the loss of sight, one of the greatest losses suffered by the newly blind person is his lack of access to independent observations of current happenings. No longer does he know the trend in hair styles, clothing, etc., through visual observations; he must rely upon others to keep him alert to current trends. Of course, there is the media - radio and television news programs to advise him of current events - and brailled or taped magazines and books to allow him access to current literature. However, unless someone reads the local news to him or tells him that a certain building is no longer standing where it was, he will not know this. It's keeping up with the styles, things going on in the community, that is one of the greatest losses, especially for the older person.

Another loss is loss of appreciation of beauty. This loss of visual perception is difficult for the blind person to discuss. We can listen to beautiful music and know it is beautiful but, no matter how long we may look at a beautiful painting or a pretty face, we cannot perceive it by ourselves - someone else must tell us. To an artist or someone with a highly developed aesthetic touch, this is a very serious loss.

Perhaps those of us in the field of blindness, and especially recreational therapists, may be able to come up with some ideas of how the blind person may take full advantage of his remaining senses in his efforts to appreciate the beautiful things around him, the pleasurable routine things that people enjoy. I know that when I have a drink I find it more pleasurable if it is in a stemmed glass rather than in a paper cup. It seems to taste better, if I can feel the stem of the glass with my fingers, my sense of taste and of touch working together. Yet, how can I visualize the little five-year-old in dirty dungarees, torn shirt, and with a missing front tooth, unless you tell me all about him?

Many times we are asked, "What are the recreational activities for the blind?", and as we all know, what may be recreation for one individual may be work to another. What one individual really likes may seem to another to be a bore. Loss of recreation opportunities is a serious loss, and it is extremely important for the recreation staff, particularly with the newly blinded person, to find out what recreational activities he enjoyed and help him to re-engage himself in these.

I think that one mistake recreational therapists have made in their dealings with blind persons is that they have tried to fit the blind person into the recreational activity without considering whether or not he has recreational likes or dislikes. Either we push him into activities for which he has no interest or we tend to segregate him in recreational programs set up solely to serve blind persons. I know there are many blind persons who will feel more comfortable in a segregated gathering because of their fear of competing with sighted persons, but there are just as many blind persons who, if given the chance, would like to participate in some of the activities offered by their own community recreational centers. However, they, like you or I, do have recreational preferences and these should be considered before we decide for them that they will be happy here or unhappy there. They alone can tell you what they like to do and, therefore, with your help and understanding, they will successfully fit into your recreation programs. I wonder also if we spend enough time helping the person participate in activities of organizations; e.g., Eastern Star, Elks, Kiwanis, of which he or she is, or was, a member.

This fault of making decisions for the blind person is not only found in the field of recreation; it is also apparent in vocational rehabilitation. Too often the vocational rehabilitation counselor attempts to make the decision concerning training and employment for the newly blinded person without first consulting him about his vocational goals. We tend to "write him off" before he has become adjusted to his blindness. Many times we ask him, "What do you want to do?" before he knows what he can do and is ready to make his decision. We should give him time to make his adjustment, then let him share in listing certain vocational goals, the decision making. Recreational goals should be decided in the same way - a joint effort between the blind person and the recreation therapist.

If you as recreation therapists want to help the blind person to become a functional part of your programs, you must help him to attain a sense of independence and self-assurance. This is vital to his overall adjustment to his handicap.

During the first days of blindness, it is difficult not to become dependent upon others but, as time goes on and you begin to adjust to your loss of vision, you must be taught that you are still a responsible person and, therefore, you must do certain things for yourself. Well-meaning family members and other people make this more difficult by saying, "Oh, don't do that, I'll do it for you." Attitudes of neighbors, friends, the public, reinforce the tendency of the individual toward dependency and leads often to loss of self-esteem. For example, when the woman who has become blind goes out in the yard to hang the washing on the line, the neighbors comment, "What's her husband doing? He's lazy and inconsiderate. He's just sitting watching the football game." If the young boy who is blind wants to go out for a walk alone,

mother or father says, "What will the neighbors think?" One loses one's obscurity when one becomes blind and one's self-esteem rating may go down. Independence is a key to unlock the door to rehabilitation; it helps the blind person to become assimilated into the mainstream of activity and also helps to promote his self-esteem.

When I talk about adjustment to blindness, I mean that we must look at the four types that prevail for the rehabilitated blind person:

1. Apparent Adjustment - This is an artificial adjustment; the blind person seems to be adjusted to his handicap because he is able to crack a smile; however, he may be crying bitterly inside. This blind person still needs professional help to aid him in coming to grips with his handicap and we should be able to recognize his need and respond to it.
2. Temporary Adjustment - This adjustment is frequently found in blind persons who have been situated in a sheltered setting. Once they leave the security of the setting they are unable to cope with sighted persons around them. They need to gradually build up their self-assurance by being gently forced into associations away from their sheltered sanctuary. Go slow; don't rush, and the results will be lasting.
3. Isolated Adjustment - A blind person may be very competent in reading and writing braille but he may lack the basic skills in personal management, mobility and sociability. If we help him to achieve these skills, we can lead him toward the fourth.
4. True Adjustment - This is what you in the field of recreation and those in the field of rehabilitation should be striving for. The ability of the blind person to walk into your recreation center, or anywhere else, and not be afraid to compete with sighted persons around him. And you, in your attitude toward him, can help him to reach that point where he can honestly say, "You know, I feel at home here."

Helping the Blind Person Achieve Independence

James Kimbrough, Chairman
Orientation & Mobility Dept.
Greater Pittsburgh Guild for the Blind

Over a period of eleven years I have had the opportunity to see something like 650 blind persons go through the rehabilitation process, and I should like to reiterate some of the ideas that were mentioned to you earlier. They are simply this: when blindness strikes an individual who has seen, it's tough, devastating. Once it happens, it requires more than the minister saying to the person, "Well, everything's going to be all right." It requires more than prayers. It requires more than a friend sitting with the blind person at home trying to comfort the person; he requires professional assistance in the rehabilitation process. Those of you who come in contact with blind persons; those of you who have students who in their future endeavors will come in contact with blind persons, will find that if the blind person has not had the opportunity to undergo total rehabilitation, your efforts at best will be difficult.

Our function in rehabilitation, as I see it, has four main thrusts. When a person loses his sight, he needs to have the other senses trained, and in many cases training in the use of tools and devices. He needs restoration of psychological security, and those directly responsible for helping this person achieve these goals, along with the blind person undergoing rehabilitation, also have responsibility for trying to influence the attitudes of sighted persons.

We have learned that when a person loses his sight the other senses do not take over automatically. If you are considering curriculum or considering passing on information to your students, this stereotype, this myth, needs to be dispelled very quickly. The person needs to regain confidence in the other senses and this implies that the person has to undergo training. Anyone involved in rehabilitation, who is not providing specific instructions in how to use the other senses, is taking a lot for granted. We know that a person who loses his sight will in time, even without the benefit of training, become rather efficient in the use of his hearing and sense of touch, but this involves trial and error. A person who wants to go down the street on a trial-and-error basis is risking his life. A person who has to cross the street is, in fact, risking his life. The person who attempts to sign his name is, in fact, risking embarrassment.

Learning based upon trial-and-error, we think, is not enough; it has to be very specific. There must be sensory training, structured in such a way that the blind person is shown how he can

use his senses to the best advantage. This involves, very briefly, demonstrating to the person the fact that his ears work for more than just listening by presenting him with opportunities for practice of sound localization (determining the direction of a sound); practicing sound discrimination (taking sounds that sound very similar to each other and picking out the one that is most useful); developing the ability to deal with the process of sound selectivity (taking a number of sounds and picking out the one that is most useful). The need for this ability becomes apparent when we consider the person who walks where there is traffic and has to find a certain cue in order for him to cross the street. The blind person also needs to develop the ability to use what we in the field refer to as "reflected sound" and what many laymen erroneously call the blind person's "sixth sense." Reflected sound is, very simply stated, the ability to perceive echoes in the absence of echoes. You may notice the well-trained blind person who's able to walk straight down the corridor and not walk into the walls; he's simply making use of the reflected sound. The person who is able to walk towards a wall and stop before bumping into the wall is making use of what years ago was referred to by many people as "facial vision". We know now that it's a function of high frequency sound; a function of detection, detecting pressure and changes in air pressure. Leaving the development and utilization of these kinds of abilities to chance is totally inadequate.

The person also has to be provided with the opportunity to practice using the sense of touch, not just putting the hand on something and identifying it for what it is, but being exposed to three-dimensional shapes: recognizing smoothness, roughness, texture; being able to identify things not just with the hands but with the arms and legs; recognizing surfaces under the feet whether it's with or without shoes. All of these things have obvious implications in performing other types of skills.

The person needs the opportunity to develop confidence in kinesthetic memory, muscle memory, the type of perception we all have but don't pay any attention to. This is the sense that lets us know without looking whether we are sitting in a chair, whether our legs are crossed, whether our right toe is pointed to the left, or vice versa. This is the sense that enables us without looking to place something on the table and later on reach for it. This is the sense that enables us to learn the activities that we call recreational skills. The blind person who learns how to bowl has to rely heavily on kinesthetic memory. These are examples of what constitute the structured aspect of rehabilitation known as sensory training.

A blind person needs complete and accurate feedback and when we apply this to other skills, we have to talk about hundreds of things that you and I take for granted. The routine things that we do in which we rely on sight have to be taken care of within the adjustment process (e.g., the matching of clothing, sitting down to eat,

cutting meat, lighting cigarettes, combing your hair, telling time, dialing telephones, dropping something and picking it up, pouring liquids, cooking meat, preparing drinks).

The blind person has to undergo training in how to get from place to place. This is the mobility aspect of adjustment and mobility needs of people vary. Some people simply need to learn how to get around within a room; others need to learn how to get from one room to another; others need to go out of the house, walk up and down the sidewalk; others need to walk from one block to another; others need to shop, transact business, go to the stores and come back home. Some people need to learn how to use buses or subway trains to cross town, to go into places as complex as downtown St. Louis, downtown New York. Other people need to learn to travel on farms; to get out into the woods; to travel in the suburbs. All of these skills contribute to restoring the person's ability to function within his community.

I would like to illustrate and give you all the opportunity to participate in some of the real problems associated with blindness. I think that in so doing it will give you insight into some of the reality problems. In doing this, I would like to make use of the blindfold, for I think that there is no better teaching aid than this device for those who are going to work with persons who are blind. Before doing that, I would like to mention something that should be rather obvious. Wearing the blindfold is not what it's like to be blind. Many people who come to observe in the rehabilitation facility, come in and say, "I'd like to try this." They put the blindfolds on and when they come out say, "Now I know what it's like." "Gee, I didn't know that it was this way." That's very, very erroneous. There is a very, very important difference. Those of you who use it today and those of you who want to use it later on in classes have to make this distinction: always in the back of your mind you know you can take it off.

Demonstration

Half of the persons in the room were then blindfolded with occluders and those who smoked were instructed to light a cigarette. Persons sitting next to them were asked to place an ashtray where the smoker could locate it and to watch that the smoker didn't light the filter end or burn his fingers. After their cigarettes were lit, the smokers were asked to reach over to the ashtray in front of them with their free hands and then to return the hand to rest position. They reached over and back again until they knew exactly where the ashtray was, had established a motor pattern for locating it. They were asked to pick up the ashtray and place it in another position, then in a second position, and a third and were then assisted in putting out their cigarettes. It was noted by observers that all of the smokers had some difficulty lighting their cigarettes and basically all had difficulty locating the

ashtray. The leader pointed out that for all intents and purposes they were newly blinded and the only way that they could learn to do these things smoothly would be through practice with feedback from a competent instructor.

A water pitcher and empty paper cup were placed in front of each of the blindfolded participants; they were instructed to pour a cup of water and everyone was told to notice what they did with their fingers. In general, it was observed that they placed their fingers in the cup and at the edge of the pitcher in order to avoid spilling any water. The leader then asked: "How many persons in the room would drink out of the pitcher now?"; "How many, if you were at a party would want your drinks poured in that manner?"

Another empty cup was then provided and the following instructions given:-

Hold your cup in such a way that your index finger is around the outside and slightly below the edge of the cup.

Put your other hand on the handle of the pitcher.

Pick up your cup, bring it over to the pitcher and locate the lip with the cup.

Keep the cup in position and slowly pour the water into the cup.

Note the temperature as it passes your fingers and listen to the sound of the liquid as it goes into the cup.

Try and bring the liquid up to the level of your index finger, then set the cup down.

There was general uncertainty and shaking of the cups. Some persons poured half a cup of water and others only a few drops. The leader assured the participants that this happened routinely as people learned the technique and that with practice the necessary skill could be developed.

Persons who had been observers during this demonstration were then given the blindfolds and the group moved out into the hallway for demonstration and practice of human guide technique. After the blindfolded participants with their sighted guides had walked up and down the corridor a few times, the blindfolded persons were asked if they knew where the meeting room was in relation to their present position in the hallway. There was a general sense of confusion and the leader pointed out that such disorientation was to be expected until one has been taught to be alert to some of the cues which are present in one's environment.

Following the human guide technique demonstration, the group reassembled and the persons who had been blindfolded were asked to share with the other participants their reactions to walking around without sight. Among the reactions expressed were a blurring of sounds and loss of sound differentiation, a sense of insecurity, stiffness and inability to relax, difficulty in judging distance, out-and-out fear. There was general agreement that it felt good to stop walking and that they were glad they did not have to walk around by themselves.

Discussion

Participation under the blindfold in a mobility demonstration is a good way to learn a little about a very severe loss. The person who loses his sight is faced with these kinds of fears, some of which are extremely real and some of which can become neurotic. What happens, in essence, is that the person is reduced almost to infancy. The person who fears that the next step he takes is going to be into a hole, or fears that he's going to stumble over something every time he takes a step, is beginning to give in to neurotic-type fears. The person who is worried that someone may have left a chair in his way and he will bump into it, causing himself embarrassment, or is afraid that someone may have left the door standing slightly open and that his head will bump into it, has realistic-type fears.

Many people who were new and uninformed about blindness and its effects, when assigned the task of helping blind persons learn necessary skills, made use of the blindfold. They put it on to see what the problems were in eating; e.g., what were the problems with a fork? Many of the techniques that have been developed over the years resulted from the use of this device. In considering the various multitude of activities in leisure time recreation, use of the blindfold technique would be helpful. Unless the blind person is well-oriented, unless he is well-trained, forget recreation.

Questions and Answers

(Q) If a blind person is going to be in a recreation program that I am responsible for, and I want to introduce him to the room and to the other essential rooms, such as the rest room, how much information would he need? Would he need to actually walk around? If he is given dimensional sizes, will it make him feel comfortable in the environment of that room; e.g., a craft room, where there are permanent pieces of furniture and equipment?

(A) Some people like a lot of detail. If the person is well trained, he will ask you for the type of information he needs. If you're not sure, my advice would be try to be as organized as possible, to keep the description as uncluttered as possible. A description and orientation are two different things. We can

describe this room as being very large, with green walls, two lights and windows, a floor with carpet on it. That's a very good description, but for orientation purposes, the person has to have something more concrete. He needs to know where he is in relation to the total room. He needs to know the shape of the room, in general, and, based upon that shape, you point out major reference points - not chairs, for chairs are movable. If he were standing in that door, as an example, tell the person that directly across from him is a long wall. If he wants to know the distance, fine, but he may not be able to relate to distance very well. On the wall there are two large windows, one on one side and one on the other. On this side is a fireplace; on the other side are two doors. If the person wants to go around the room, you can go with him but do keep your remarks as uncluttered as possible.

(A) If the person is newly blind, your description sometimes may be a little misleading or confusing to the individual. Many times when a newly blind person comes into the rehabilitation center, or into the activity or arts and crafts room, the instructor stands and describes it, by saying, "the benches are over there." "Over there" does not mean too much to this person. You could stand in the corridor and say, "if you walk three-fourths of the way down, the men's room is to the right" or "the manual arts room is to the left." By doing this you may be putting the person on his own too early. If he is a well-trained blind person and you know he travels fairly well, then you may not have to give him as much orientation; a walk around the room will give him an idea of the size and dimensions of the room.

(Q) How much orientation have you (a blind participant) had to this room? What kind of information do you have right now?

(A) When I came in, I think I met someone at the door, or when I turned the corner I heard a voice that gave me the direction to the door. I had never been in the room before so I stood down at the other end. I asked the planners of the meeting where they wanted me to stand, or sit, this morning, and as I was sitting here I asked where the screen and projector were so that I would feel comfortable and wouldn't be looking to my right for the screen when it happened to be behind me. I checked well before the movie started. When I stood up to speak I had the table as a reference. If I don't have such a reference or something behind me, I may be standing and gradually find myself talking to the wall and not to the group. So, if you noticed I touched the table many times, and from the table I got direction as to where the other people were. If something were a little humorous and someone laughed, it also gave me direction in the room. If I walk out on a stage and don't have a good clue, a cough in the audience or some other type of noise may help me to get direction. I feel much more comfortable if I know where the people are.

Relative to orientation to the hotel, as far as this floor is concerned, when you get off the elevator on this floor, my room is down to the left. There's a good clue for the room as you walk down the corridor. My feet are hitting rug and then all of a sudden it is marble, or it's wood or something, but not a rug. When I hit the rug again I know the third door on the left is my hotel room and that the door knob is on the left. If I didn't have a good clue, I might put a rubber band around the door knob.

Comment

These things just don't come to the newly blind person. I haven't seen anything in the training that is amazing, that's a miracle. There are many, many common-sense kinds of things that play a big role in rehabilitation and it's basically those that we are talking about. Just sitting in this room and hearing some of the machinery down there, the person who has learned how to estimate distance gets a general idea of how long the room is. The person who has had a lot of experience with carpeting and drapery and numbers of people within a room can estimate the size of the room, based upon these sound clues. The little things, e.g., the cough, the sneeze, the movement of a chair, the cigar, are all important for the trained person in becoming oriented.

(Q) Constant reference has been made to the person who has been rehabilitated but we may be dealing with people who have not had that thorough training. Would it be a good rule of thumb in that case to just give them the information that they need at the moment rather than a large amount of introductory material which may not be used immediately and ask them to tell you when they want more information?

(A) If he's a newly blinded person and it's the first time that he is meeting other blind persons, or is in an environment that has anything to do with blindness, it's been a big step for him to accept that he is coming into a "blind environment". If you put this individual on his own too early, then you will find him lost and even maybe changing his mind about receiving help. It's an excellent question and many times, I think, we look at an individual who seems to be functioning well and don't recognize that the person needs help.

Comment

We like to think of it in terms of a kind of dependent-independent continuum. The newly blinded person is extremely dependent in the early stages. Father Carroll refers to it as the weaning process whereby the person is gradually placed more and more on his own and the instructors gradually move away.

(Q) What about children in school? I am thinking that many times recreation people work in schools, not residential schools, but

in public schools or that sort of place.

(A) One of the big things that we must do with the youngster is to teach him body movement, body posture, coordination. You look at a youngster who has sight, is 3 or 4 or 5 years old, walking down the street and will see he walks like his mother or father, smiles like them. Kids with sight imitate their parents but youngsters who are blind do not have the privilege or the opportunity to imitate. Therefore, some congenitally blind youngsters have poor posture, coordination, body awareness or body movement, facial expression. We must work with the youngster, to enable him to have good coordination as well as good spatial orientation, e.g., if he's crawling on the floor, where he is in relationship to the crib, to the door. We have found that many parents of a blind youngster keep the youngster in the crib or in the playpen a little longer than the sighted youngster because the parents are afraid he will hurt himself while crawling, or they will carry the youngster from one place to another instead of walking with him.

In the early grades the blind youngster becomes a spectator, does not participate in physical education and some of the other activities that sighted kids do. We must work on this so that these youngsters will get good physical education and recreation in the early stages.

(Q) Many recreators are working with people in nursing homes and extended care facilities. These are elderly people who have not had the benefit of any rehabilitation whatsoever and are gradually losing their vision due to diabetic complications, glaucoma, etc. One of the things that we need to know as educators is how much practical training or information we can give recreation workers so that, even though they are not experts, they can help these people function a little bit more independently within the nursing home?

(A) I am not sure that the recreation people, unless they are directly involved with rehabilitation for the blind, can actually give the elderly person the kind of sensory training that will make them more independent. This kind of thing is best handled by the person trained to do it.

(Q) Our problem is there aren't enough trained mobility instructors. This same problem exists with many of the professions; there aren't enough specialists to go around. I think we have to stop protecting our little kingdoms and try to find ways to share the information that we have as best we can. Couldn't the recreator provide these people enough travel-training and orientation sense for them to be able to move from their room down to the recreation room?

(A) I think it is most important to have a trained orientation and mobility specialist come into the nursing home to train, not just the recreational staff but all of the staff; e.g., the orderlies, the secretaries, the director of the nursing home, in the human guide technique, how to walk and work with the blind person. Too

many times we have gone into a nursing home or a large program for older persons and found that the blind person, in order to get from one floor to another, is going in a wheelchair. It's easier for the attendant to take this person in a wheelchair but it does very little for the blind patient. It would be good if the complete staff had some knowledge of human guide techniques; e.g., how to walk with a person, how to assist the person in getting on an elevator, how to assist the person in getting into a pew in church or into an aisle in the auditorium without commotion, pushing and shoving. Then the blind patient would feel comfortable walking to the recreation room, the arts and crafts room, the auditorium, or just taking a walk out around the grounds. I think what we need are more persons dealing with personal care, not so much teaching rehabilitation and mobility, but knowing how to walk with an older blind person using the human guide technique and seeing they are comfortable. When this is done, we will find more older persons, with more flexibility, getting around the grounds with sighted assistance.

Comment

In terms of the older person, I think we specialists in blindness are missing the boat if we don't think that the recreation therapist or someone in another profession can teach pre-cane skills, protective techniques, human guide techniques, room orientation.

Comment

This is the kind of thing we were referring to: getting the staff more aware of what can be done and training the staff to do it.

Comment

In regard to posture and normal movements of the body, often the appearance of the person is more of a factor in determining social acceptance and employment than the disability itself. If a person can be trained to have as normal motor movements or habits as possible, it would be extremely helpful.

Comment

Getting back to the elderly, the problems we encounter are much more difficult because it is not just loss of sight. Usually there are accompanying deprivations such as hearing loss, diminished tactual senses, and other physical problems. There are many more suffering from the problems of glaucoma and cataracts and tunnel vision than there are persons who are totally blind. These are the kinds of problems that we have to address ourselves to. The ideal situation that you've talked about in terms of rehabilitation doesn't always apply; it's rather puristic and relates to a different population.

Comment

I think also we have to be very careful that when we give a cane to the blind person the person is ready to accept the cane. One of the things that's happened in the last 10 or 12 years with trained orientation and mobility specialists is that the cane has taken on a whole new look, and to a large extent dispelled the old image of the cane and the tin cup. So whoever it is, be it a mobility specialist, recreation therapist or other professional person, we have to take time to sit and talk with the individual about the cane itself and his feelings about using the cane. This is especially true of the older person in a nursing home. We must be careful not to say or imply, "Here's the cane, you'll be all right, it'll protect you, it will be a badge to show that you are blind", and we must be very careful when we give it to the individual.

Comment

Speaking from the personal point of view as one who has worked with blind persons, I should like to call attention to one's own feelings about blindness and blind persons. I remember the first time I was with a blind person, going in and talking to him, not knowing he was blind and having him do things around me that I hadn't associated with blind persons. I also remember that the first dinner was a traumatic experience for me, as I sat there and watched people of an older age group eat with their fingers.

So, I think somewhere along the line we have to think of the individual recreator's personal point of view. We've been talking about how to work with blind people, but we have not talked about how we feel about it. We've also talked about specialized services being available from agencies serving the blind, but I'm wondering how many of these agencies are really reaching out to the community. What do people in the community know about orientation and mobility or rehabilitation specialists, or what services are available? I don't think many persons understand what these specialists are or what they can do, or even that the agency may have these kinds of trained personnel who can come out and help him. Our agencies and professions are all mutually exclusive. We don't know, or ask help of, one another whether it's a recreation center or program, or an agency for the blind.

Comment

I feel that not only the professional person but other staff members could give the blind person enough orientation so that he would feel comfortable, know his room, and if it is on the same floor get to the lounge or other recreational setting on his own. However, in a nursing home or other type of building, when travel involves stairs or there's any danger factor, I think that this must be taught by a specialist, somebody who has some

experience and can judge how far this individual can go as an independent traveler.

Comment

One of the other problems one encounters in institutions, and nursing homes in particular, is that the person having diminished sight complains about the staff moving things around. I had one elderly person tell me, "My biggest problem is the sighted people that are surrounding me. They are completely inconsiderate of how my life is organized, my need for certain cues and they move things around."

Comment

I think we have to be careful not to set the whole floor up just for the blind person. In other words, whether it's a recreational room or a lounge, if you're going to change furniture you should mention it to the blind person, but don't say, "We never move things here because we have two blind persons on the floor." We also have to work with the blind persons so that they don't feel that it is their floor, or that it's their living room, and, therefore, nobody can change anything around. It's easy to blame the sighted public or to blame other persons for something, but blind persons have to know that things are not going to stay their way. If there are real major changes in the room, it's important to tell the person, but I don't think you should keep every chair in its exact spot.

Mr. Kimbrough, in closing the discussion, pointed out that the puristic approach referred to earlier was intentional; it was done as a frame of reference. "We have to recognize that everyone is not totally blind; the losses that were discussed earlier affect people to varying degrees. As we work with people we must consider each as an individual in light of his own abilities and disabilities."

Meeting the Developmental and Activity Needs
of the Pre-School Child

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I have been asked to tell you about some of the suggestions I make, in visiting the homes of the blind preschooler, to help the child develop basic skills and learn about the world around him. The earlier he is referred, the greater the chance to prevent problems and set the stage for optimum development; but until the child's parents accept the fact of blindness and their responsibility to train him, they cannot use suggestions. It is normal for them to experience strong negative feelings and to reject for a time the fact and responsibility, if not the child himself. I try to elicit expression of these feelings and assure them that they are entirely normal. Parents cannot feel and express love for the child while gripped by such emotions and airing of these feelings usually reduces their intensity and opens them to reassurance and information. Anything that interferes with a baby's close relationship with his mother precludes normal development.

Blind babies have a strong pull toward autism but if parental feelings assert themselves soon and they are cuddled and talked to, most will become loving and outgoing. Passivity remains a threat to be combatted with much stimulation, on increasingly mature levels. Most parents of handicapped children have difficulty in disciplining them and requiring self-help, and I try to implant the conviction that kind, firm control and demands for independence are not unkind but, on the contrary, are acts of love that help the child to see himself as lovable and capable. "Spoiling" and making pitying remarks can slow his progress and make him see himself as helpless, incapable and less lovable.

Because self-doubting parents are ineffective, they must be convinced that in the early years they not only are the child's teachers but, with help, are the ones best qualified to train him. Young children learn best from those with whom they are closest. Through discussion and literature I help parents to anticipate next steps and bolster their resolve to handle the child in desirable ways and to follow professional advice for overcoming problems long enough for success. Pushing too hard, often to reassure themselves of the child's normality, can cause delayed development and resistance to teaching in some, but the classic pattern of pseudo-retardation is one of too much restriction, protection and indulgence and too little expectation, stimulation and discipline.

In the first or second visit, I show pictures of children doing some things that the parents might think impossible and talk about some of the children's achievements and problems and the kinds of handling we think was conducive to each. I lend my own and other booklets and books about ways to promote a blind child's development and ones on normal child development. Among these are Baby Learning Through Baby Play, The Blind Child in Family and Community, and sometimes the booklet called, The Infant Stimulation Kit, which, although written for use with retarded children, is filled with ideas for normal ones.

I tell of the tendency of the child without vision to live within himself and the resistance to handling seen in many pre-matures. They are warned that a baby left in his crib too much may also resist cuddling, protest being placed on stomach, or vice versa, or instead of moving and exploring, turn to his body for stimulation. I advise them to cuddle, talk to and kiss him often, hold him close and talk to him when giving him his bottle rather than to prop it up; gently help him to enjoy his bath, stroking his limbs playfully with the wash cloth, and let him play with his mother's body. Soon I suggest that they touch his features and body parts and talk or sing about them, play lap games such as "Give Me Sugar", "Peek-A-Boo" with a cloth, and "I'm Gonna Getcha". All this helps to develop a base of security, the concept of object permanency and that of body image without which he cannot move out for himself and understand the world about him. If a child does not learn to love and want to be loved, he surely will not want to do as others do for fun or to exert himself to win approval.

I advise the parents to accustom him to varied surfaces, such as bare floors, linoleum and carpeted ones and, if he is fearful, to play with him and perhaps even feed him on the floor. Many blind children show an aversion to fuzzy, gooey, hard or rough substances which could be prevented or easily overcome. The same is true of sounds such as of the vacuum cleaner or noisy vehicles. They cannot learn through their fingers or ears and be motivated to use them fully until these aversions are overcome.

In addition to the rattles and small toys that children usually have, I recommend or loan others such as the Cradle Gym, strings of plastic balls, the bird with a ring on a string which can be pulled to activate a music box, and soon the Busy Board. The ball is a basic plaything and there are clutch and textured balls, those which make a sound when rolled and ones large enough to roll on.

The blind child's hands must be guided to these toys until he learns to search for them. Use of the hands at the body midline is important and the child should be helped to play with his own hands. Then both hands should be put on the bottle while he is fed and on such toys as a soft ball, action or textured blocks and

a soft plastic accordian. He should be taught to Patty Cake and clap.

A blind baby does not turn his head toward a sound as early as others. He can be helped by turning it toward the sound of a rattle or bell, music box or an animated speaker. In the early months toys that make a noise are needed to attract his attention and help him to locate sound. Soon, however, he needs others so that he will not like only noisy ones and can be interested in their sensory and manipulative possibilities.

As soon as the baby is awake for some time, he should be moved from one location to another and he can be in an infant seat for increasing periods. The playpen is useful for protection, as a constant location for toys tied to its bars, and for pulling up, but he should be out of it more than he is in it and it should be discarded early. The blind child is likely to learn to roll around on the floor but may need to be enticed to move forward through parents' voices and sounds made with toys. The walker may be fun but is of questionable value because he can get about by sitting and moving his legs instead of crawling, pulling up and cruising.

I tell the parents that blind children cling to the familiar and may resist transition to more mature ways of functioning, such as to coarser food, sitting in a high chair and doing for himself. He may get "hung up" on a certain toy or odd article. I explain that this occurs most often when changes are not introduced at the appropriate time or without enough persistence, and when parents cater to unreasonable whims, demand too little of the child and seldom take him out except to the doctor. Independence and becoming a doer is fostered by delaying picking him up or giving him his bottle or cookie until he reaches out.

If solid food is not introduced by teething time, or before, the child is likely to reject it and appear unable to chew. It's very difficult to teach him later and he is apt to eat too little solid food and become anemic. As soon as he sits with support, he needs a high chair or feeding table and should be encouraged to gnaw on a teething biscuit or cookie and, if it drops, be taught to search the tray with both hands rather than have somebody pick it up and jam it into his mouth for him. He should soon finger feed and, when he holds things and brings them to his mouth, be taught to use a spoon. I talk about nutrition and disciplining oneself not to placate him with extra bottles or permit starchy snacks all day. Parents often complain of sleep problems but many blind children have good sleep patterns, especially those who have a regular bedtime, an early nap and are not allowed to sleep off and on by day, are busy, get fresh air, and are not rocked to sleep or picked up at the first sign of protest.

The blind child needs to be taken out as much, or more, than a child who sees. He needs to become accustomed to it, make social contacts, learn about the community and develop poise and manners. Parents often must be helped to acquire a tougher skin and not be hurt by honest questions or tactless remarks. The harmful effects of pitying comments and catering to unreasonable demands are discussed, as is the parents' role in setting an example for others and in educating the public.

With encouragement and without specific help, some blind children walk by 9 months and can be expected to by 1½ to 2 years, but suggestions such as those in the Portage Project Kit of 400 cards, each of which describes a small step in several areas of development are helpful. When the child begins to walk, parents are told not to make too much fuss when he tumbles or bumps himself, as all children do, or make him fearful by, "Oh, dear", "Oh, dear", which will make him afraid to move at all. This can delay development of the ability of a blind child to avoid bumping into large obstacles through unconscious use of auditory cues that we ignore ("object perception" or "facial vision") and which he can later be taught to use consciously.

They are advised to use prepositions like "up" and "down" as they lift the child from crib or high chair, to direct him verbally to objects he desires; teach him to search with both hands for dropped ones. As he becomes more mobile, parents are urged to promote exploration by leaving toys scattered in every room, or in a container the child can learn to locate. The home must, of course, be child-proofed for safety and only safe things put in bottom cabinets and drawers. Although the child needs discipline, and without it can seem not only less lovable but even retarded, too many prohibitions and hand slapping, in particular, can make him afraid to do things which it is his business to do, i.e. to explore, examine, thump, mouth and throw. So, for a time breakables should be put away but later he must break things in order to learn to be careful.

As the child gains in body control, he can be sent to fetch things, and landmarks inside and out should be called to his attention. He should be taught to somersault, jump and run; by moving his body or breaking skills into components he can learn to follow verbal instructions. I acquaint parents with the vocabulary and motor skills he should know and tell them that much enthusiastic stimulation will be needed if he is to use his body enough to develop the strength, skill and balance required for mobility training and participation in future physical activities. Blind children can be taught to use Tyke Bikes, tricycles, trampolines, sliding boards, climbers, roller and ice skates at near normal age. A few preschoolers may learn to swim but a number learn to jump off the side of a pool and dog paddle a few strokes to a parent. Walking on blocks with elastic over the foot and on stilts of first low and then tall cans with long rope or wire

handles is fun.

When the child can walk and can understand what is being demanded, he should be toilet trained and the American Foundation for the Blind pamphlet on training a blind child is a good reference. He must also learn to dress and wash himself. These are maturing steps on the road to independence and if these tasks are not accomplished at a reasonable age, his self-image and the image of those about him will suffer. Fathers are not apt to want to take a child over 3½, who is still in diapers, with them when they go out on errands.

The child must be taught to identify sounds from the early months on and allowed to touch the source when possible. A constantly droning TV defeats this purpose for it not only drowns out other sounds but mothers are less likely to identify them for him, or to talk to him at all. Quiet music is conducive to passivity and body rocking and some blind children feel like fish out of water without it, and cry when it is turned off.

Although it is important to use the child's name often in the early months, the pronouns "you" and "I" should be used soon rather than his name and the title of the person talking to him. Many children are late in using the word "I" due to faulty personality development but this may also be related to the tendency of adults to use immature speech with blind children and to talk about more than to and with them. Aside from those children who have not even learned to love, this is most apt to occur in those of whom too little is expected, who have no self-help skills and responsibilities. The words "look" and "see", as we mentioned this morning, are used by blind as well as sighted people for "examine" and "understand", so I advise parents to say, "Look at this" rather than "Come feel this"; the word "blind" should not be avoided or the child may think it something to be ashamed of. The child's understanding of words and spatial concepts must be tested often and, as he matures, he should be helped to express himself and ask about these things.

Parents are told that they must teach the child much that others learn by looking and imitating. I loan a graded series of toys for development of tactual discrimination and manipulative skills and the many concepts the child must acquire. He may resist having his hands manipulated or being told how to use a more advanced toy, but he must be persuaded to and he should, of course, have many to use as he wishes. If he becomes fixated on a toy, it may have to be taken away so he will progress to others.

Parents are advised to name sizes, colors, shapes and locations of toy parts. I once heard a speaker use the term "kitchen sink therapy" to illustrate how a mother can help her

child develop the language forms and much of the vocabulary and concepts he needs by labeling and comparing things with him as he explores, explaining what she is doing in the kitchen and letting him participate. She can also do this while performing other household chores, as can daddy as he uses tools.

By age 2, after having turned the pages of homemade cardboard books with interesting textures pasted upon them, I hope the child can be interested in the content of books. At first, the commercial ones with tangible illustrations for sighted children may be used but soon he should enjoy rhymes and simple stories without doctoring up the pages. Parents must help the child understand the content and teach him to ask the meaning of words. He needs much first-hand experience with many things, for how else will he know what the straw, twigs and bricks are in the "Three Little Pigs"? They are told about Talking Books and the fragrance books which, when scratched in places, give off the odor of the substance named in the text. He will also enjoy records, and these should be lively ones with directions for actions. Both books and records should be those he can understand rather than fairy stories.

The child should visit places of all kinds, e.g., playground, pet store, an apartment if he lives in a house, zoo, farm, library, church, all kinds of stores, and to daddy's place of work, if possible, and ride on various kinds of vehicles. He should be allowed to touch items and ask questions but must first have gained the poise and discipline to behave acceptably. Fathers are encouraged to take him on such excursions. Parents should talk with him about plans for outings and warn him that Santa, clowns and zoo animals may be noisy but will not hurt him. He should be encouraged to tell them afterward about his experiences. This may reveal confusions, because he will not learn everything from one visit and words often do not mean the same thing to a child as to an adult. For example, a four-year-old, who had been told he was born in Barnes Hospital, had visited his grandparents' farm the summer before the nativity story was read to him. When asked if he remembered grandpa's barn he said, "Yes, it has animals and I was born there!"

The State of Illinois booklet, Preschool Learning Activities for the Visually Impaired Child, which I loan to parents and to schools that enroll a blind child, describes some activities for 3, 4 and 5-year-olds by age, under categories such as "What Do I Touch, Hear and Say" and "I Use My Body and I Can Do It". It lists instructional aids and their sources. The Michigan School for the Blind Pre-Cane Orientation and Mobility Skills for the Blind and the American Foundation for the Blind Concept Development for Visually Handicapped Children, although intended for use by professionals in educational settings with school age children, give parents an overview of what is to come, much of which could best be learned in the early years. The booklet, Importance of Motor Development for Young Children, which you may obtain free from the

Special School District of St. Louis County, tells about many of the exercises, animal walks and games commonly used with young children.

The importance of age-mates at all ages is stressed, at first in parallel play at their own and friends' homes or in a park, if need be. An adult cannot teach a child the social skills of taking turns, sharing, defending himself, or about property rights, make-believe and reality testing. Some children can benefit from church nurseries before entering Sunday School or a regular nursery school. The benefits gained from experience in a group of seeing children and of adjusting to a teacher away from "mommy" are a way of preparing him for a happy first year at school.

By 3-3½, if they are interested, I help parents find a not-too-distant nursery school or day care center, often aided by our state licensing workers. I offer to meet with staff first to allay misgivings and answer questions about the blind child. If they accept, I offer literature about blind children in regular nurseries and make suggestions for handling him and the other children in relation to him. Some, and I don't mean formal mobility training, but some early mobility and orientation techniques and concepts are discussed, as are a few safety precautions which are desirable for all children, such as a low guard around swings; having him go down stairs last so he will not be knocked down by others or dragged by a faster child guide. The need to point out and sometimes create landmarks inside and out and acquaint him with his room and the hall and playground is explained. They are advised to accept him at his present stage, as they do others, but to expect the increasing independence and social behavior required of others. The harm to him of catering and doing too much for him is interpreted. I tell staff, as I do parents, that children should not give in to the blind child because he is blind, but if he asks for something and is directed toward it and another child makes a bee-line for it, then he needs help.

Blind children at first usually do better in structured activities than in free play. He may need to be told of activities of other children that he might join or switched from a toy or activity he has stuck with too long. Some children flit from one thing to another and need help to make a choice and settle down to constructive activity. Some toys such as wagons and balls promote sharing. If he will not share toy parts or just rummages in a container of play parts, he should not be allowed to use them that day. He must learn that his favorite tricycle is not his alone and wait for his turn. He may not be able to keep it on a walk but he can go along a wall which he touches from time to time. One director made a circle with a hose and placed the front wheel inside of it, straddling it with the back wheels.

Blind children usually like songs, activities to records and story time, but some must learn not to interrupt constantly. They can participate in rhythm activities and circle games like "Ring Around the Rosy", "Pop Goes the Weasel", "Looby Loo", "Little Sally Saucer" and "Simon Says", if the teacher verbalizes directions and what she is doing. In marching, the blind child, if necessary, can hold lightly to the child ahead. This may not be a good mobility technique at an older age but it's what nursery children do. He should perform chores such as passing out cookies and napkins and taking used cup and left-overs to the waste container. Teachers are advised to use his name first when addressing him to attract his attention, and children might be encouraged to tell him who they are at first and what they want him to do rather than drag him toward an activity. Isolation for repetition of forbidden acts after a reasonable number of warnings is recommended for him, as for the others.

I visit nursery programs periodically to observe and make suggestions and tell parents of problems they can help the child overcome. I must also interpret to some parents the need for referral to a nursery for retarded or cerebral palsied children and counsel with its staff if he enrolls. I may need to help some parents accept that their child is slow and interpret the value and limits of evaluation. Many do not understand the difference between mental retardation and brain damage and that there are degrees of each.

I advise teachers and parents not to exempt him from standards and responsibilities expected of other children which may make him passive and rob him of initiative. When I mentioned reality testing as one of the benefits from nursery attendance, I was thinking that many blind children bask in constant unearned praise and hear little disapproval of immature behavior or poor performance. Age-mates' reactions are much more frank and even without comments the blind child learns what others do and may be challenged. For example, when a blind 4½-year-old's mother told him that in kindergarten he might be teased if he still sucked his thumb, he went down the list of his three younger sisters and Sunday School classmates, naming each, and asking if each sucked his thumb. On learning that they did not, he accepted reminders and suggestions of other things to do and the habit was soon dropped.

During the final preschool year, I bring toys for developing finer manipulative skills and kindergarten readiness concepts. These may be smaller beads, form boards with a greater variety of smaller shapes or in graduated sizes, boards with smaller pegs and those with up to 10 degrees of difference in height or diameter, construction sets and American Printing House for the Blind Touch and Tell Volumes I and II. I assemble concept boxes of 10 pairs of objects to be removed and placed in pairs according to concepts such as size, belonging together, rhyming and opposites, and

several sets of 4 or 5 identical objects with one that is different, or two that are alike, and help the child to identify which are alike or different and tell why it is so. I urge parents to use not only the materials I demonstrate but to help him compare household objects in the boxes.

We provide 13 in. gym balls blown rather hard which, when dropped, or thrown up a flight of stairs or at a wall, bounce with a ringing sound that the child can follow. He must develop strength in arms and hands and parents are reminded to let him unlock and open the car door and push heavy ones in buildings, carry heavier loads from the store and use gadgets requiring some force. They are told of the animal walks and exercises used in schools and urged to take him on longer and faster walks and teach him to step out with arms swinging.

I have not stressed eye poking which most blind children do to some extent, and I advise parents to ignore and try to combat this by keeping him busy, diverting him with toys or suggesting activities. On a preschool level nagging and constantly pulling his hand away can aggravate the habit and make him more nervous. This habit is more common and more extensively indulged in by under-stimulated children or those who do not enjoy doing things which require the use of both hands. The same is true for rocking and other mannerisms or so-called "blindisms". As school approaches the blind child should be made aware that these mannerisms are undesirable and their cooperation enlisted in overcoming them. This is no different than the way recommended for helping sighted children to overcome undesirable habits.

If I have dwelled too much on the early months and years, it is because the details discussed are the best ways I know of preventing the odd behavior, obsessions, laziness or passivity and poor social and motor development attributed to blind children. Many do develop them, but not all. This is not always the fault of parents because many factors are often beyond their control, e.g. frequent illness, much surgery, family problems, the mother's need to work, sitter's indifference or inability to use suggestions, or a parent or grandparent in the home who sabotages what the other tries to accomplish.

Unfortunately, time limitations today do not permit me to go into greater detail but I have prepared a suggested reading list for those of you who are interested in obtaining additional information about the needs and ways of working with the blind child.

Suggested Reading

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Meeting the Developmental and Activity Needs of Children and Youth

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I would like to break the developmental and activity needs into three ages. The first group is the young child, whose age ranges from six to approximately eleven years old. The second group, preadolescent, will cover the ages eleven through fourteen. The adolescent youth group will cover ages fifteen on up. The reason for this division is because these are the three age ranges I see emerging in recreational activities.

However, I would like to review briefly what has already been said about the importance of the preschool years. "The earliest months of the blind child's life and the years of preschool period are of primary importance. They determine the course of his later development."(1) It is important to remember that growth is a continuum. Each step of development is important and not all children reach the same level of achievement at the same time. Often, students reach the third grade, unable to move freely and run. In this case, it is necessary to start with the child at his level and work toward activities suited to his age level.

When I talk about the blind child, I will be referring to a child with normal intelligence and without other serious handicaps. In my work setting we find many multihandicapped children. More time would be needed than we have now to discuss the multihandicapped blind. I will also assume that the preschool years have been successful and that expected physical, emotional, and mental growth has taken place. I want to stress that the blind child must continually explore new activities. "Only as the child is given opportunity and encouragement to use all of his sensory modalities in the first-hand exploration of his surroundings can he develop the skills and the motivation which are basic to his later development."(2) Throughout the school years opportunities must be given for the child to develop independence. We define opportunities as the "...emotional climate in which the child is given both guidance and freedom in judicious proportions relative to his needs as a developing personality."(3)

At first the blind child is very dependent and it is easy for the child to fall into the trap of continual dependency. Often we find children starting school who are totally dependent on others for their care and safety. Their form of play is limited to themselves. They play records or listen to the radio while rocking or twisting from side to side. Listening to records

and the radio are good recreational activities, but not when this becomes the only activity. The more external stimulus we give him, the less self-stimulation he will need. Recreationally we need to expect as much from a blind child as the sighted child. We expect the sighted child to move about freely and to compete in some level, whether it be with other children or by competition within the child himself. The blind child needs more encouragement and help to bring him to the level of independence that is needed. Independence will give the child the initiative to explore on his own and this in return will develop more independence.

The young blind child.

I see these children as inquisitive and yet timid. They are interested in being part of the group but may not know how to accomplish it. They will need a means of entry and often a recreational activity such as a tag game or relay can be the vehicle. To those who become members of a group, the value they receive is individualized.

For example, swimming is an activity which may be introduced very early and participated in throughout all three stages of development. The blind child needs help getting used to the new surrounding. He will enter the water very cautiously and determine how deep the water is at that point. Carefully he will lower himself until his feet touch bottom. A great deal of help and encouragement is needed, but soon he will start to explore his new environment. It might be good to point out that blind children learn by the part-to-whole method. It is important to keep this in mind when teaching any recreational activity. The more the child explores, the more he is motivated to move about. He needs to test his environment by using all his remaining senses. The smell of chlorine, the echo off the walls, and the coolness of the water on his body are all stimulating him. He will need time to sort everything out. At first, a blind child does not like putting his head under water because sound is one of his chief means of communication with his surroundings.

We find this a significant obstacle when teaching a child how to swim. As in any recreational activity, the child must be motivated to continually explore and test. He will do this only when he becomes comfortable with his surroundings and with himself. Once he becomes comfortable and secure, he will need encouragement to interact with those around him.

Many children play alone although they are doing so within the group setting. If the child knows how to swim, he will swim from one side of the pool to the other. Two boys may swim together, but each is swimming for the pleasure and satisfaction he gets from the activity, and not because the group is doing it. The swimming activity is used to add new experiences and to develop new skills.

Other activities such as hikes start out as short walks around home. Opportunities should be given in which the child can explore the environment around him. As he explores and learns, he is motivated to walk further and explore more of his surroundings. This simple activity can be enriched by allowing the child to pick up rocks, to examine foliage, and to listen for new and familiar sounds.

Playground activities grow in the same way as those activities previously mentioned. After being satisfied that he can move freely, he should be encouraged to join others in unstructured play. By the nature of children's movements, he will enjoy testing out the playground equipment, which can build self-confidence and independence. "Physical activities, such as wall-bars, climbing frames, swings, ladders, chutes, barrels for rolling, water in which to play, and plenty of free space out-of-doors and indoors can help toward this end." (4) These are only tools. He will need guidance and help in order to choose and use the equipment and activity properly.

Many games which children enjoy can be played with little or no modification. "Follow the Leader", "Simon Says", and "Mousetrap" are examples of games which need little modification. Games such as "Circle Ball", "Kick Baseball" and "Spud" are excellent games for older children. Rhythms and dance are activities which can bring about creative movement and self-expression. All these activities have to be encouraged. If the blind child is left to himself, he will turn inward for the stimulation he needs.

The Preadolescent

The preadolescent stage (age 11 - 14) is an exciting and demanding time for the child. Besides being part of the group, he also does what the group dictates. If the group wants to go swimming, whether he wants to or not, he goes swimming. If the group plays tag, he will play tag. For many children it is not enough to swim. They want to challenge the other members of the group. Relays, swim contests, and individual competitions are very popular. By participating in various activities, and by doing well, he gains confidence in himself and prestige in the group. At the same time he is vulnerable to disappointment and rejection. Those around him will be reluctant to have him on their side if he cannot perform well.

His recreational activities must be chosen with care, and assistance given to assure success. We must also guard against putting him in a demeaning position. Being a batboy may sound good to us, but not always to the blind person. He should be encouraged to develop skills which have meaning for him but yet are acceptable as having worth within the group. For example, a blind girl may not be able to play on the girls'

basketball team, but she can be active as a cheerleader or a pom pom girl. Boys may not be able to play basketball, but can show great accomplishment in swimming or rope-climbing. There is always some recreational activity which he can use as a strong point within the group. Checkers, chess, and cards are activities which I have found to be a trump for the blind person.

The "gang stage", as it is sometimes called, is a very powerful and emotional time for the preadolescent. It is a time of internal searching; a time when success and failure play more of a prominent role in the child's life. Recreational activities need to be programmed to the skill level of the child. Opportunities are needed for self-testing, and self-realization. His experiences need to be continually at a higher level than before. The hike we mentioned previously will yield more satisfaction if the youngster is encouraged to learn the names of local trees by the feel of the bark, the shape of their leaves, and the role that they play in our environment.

Hobbies become more important. The youngster may become interested in collecting rocks or records of famous performers. Knitting and mat weaving are hobbies many girls enjoy. One boy I knew became interested in the calls of local birds. He would record their sounds, and then find someone to help him identify the bird. It wasn't long before he would express with great pride, "That's an American finch!" As before, opportunities for experience are needed. However, the experience must be real to him. A trip to the farm is nothing unless he gets to handle the stock.

Mobility starts early. The preadolescent years should find the youngster challenging new surroundings and searching for more independence. Trips to local areas of entertainment, such as theatres, skating rinks, swimming pools, shopping centers, and bowling alleys should be encouraged. Many of our students walk to a town just for the "fun" of it. They buy personal items in the drugstore, listen to local sounds and stop for a coke at the Burger Chef on the way back. To them, this is as much a leisure time activity as fishing.

The preadolescent needs continuous opportunities for first-hand experiences. He also needs special help over a longer period of time. He constantly needs to develop new skills and refine others. Individual activities are better suited for the blind than team activities such as football or basketball. However, the blind can enjoy, to some extent, basketball shooting skills and can play their own type of baseball. He needs to be introduced to activities which not only involve the family and school environment, but also the community environment. Scouting and 4-H are examples of community organizations in which he may become interested as recreational activities. These organizations can provide opportunities for personal growth and community involvement.

The Adolescent

Many personal changes are taking place during the adolescent years. The "gang stage" gives way to self-determination. The adolescent wants to determine for himself what is important and not important. Recreationally, he is becoming more interested in doing things with selected individuals from the group. For example, he still enjoys swimming but now goes with a close friend. The activity becomes a media in which he can carry out other needs - such needs as companionship and socialization. Recreational activities such as dances and parties are requested more often because they provide the setting needed to carry on this type of experience. Dating becomes a factor in the type of activity which is selected. Going to plays and movies is of interest to the adolescent. The old-fashioned "coke date" becomes an important activity.

Leadership roles start to emerge. More responsibility for leading activities such as planning dances or class parties is sought by the students. Girls want to be captain of the cheerleader squad; boys the captain of the wrestling team. The adolescent is interested more in his appearance and his manner, and the personality and warmth he finds in others. Girls want to learn more about make-up, and boys want to know more about men's styles. A recreational activity to meet these needs could consist of having a class on make-up with added emphasis on wardrobe grouping and style changes. The playing of cards and table games are activities in which the adolescent remains interested. Card clubs may provide the setting in which he can learn more about others through conversation. "Bull sessions" pop up almost any time three or more people get together.

All the activities and skills developed by the adolescent over the years are being molded and shaped to fit future recreational needs. Therefore, certain activities draw more emphasis. "Activities which can be pursued by an individual independent of the group, as for example, swimming or bowling, should receive particular attention. They are the ones which will more likely be continued into adult life." (5)

Recreation serves the developmental and activity needs of the blind. Recreational activities can provide opportunities for satisfying experiences, which can help the individual become active and aware of the world around him. They should be the kind that will motivate the individual to become more involved in what is going on around him and to become more independent and self-directing.

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Common Visual Losses - Causes and Considerations

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Although it isn't exactly the order of frequency with which you encounter these problems, I will, as a framework for organization, discuss common visual losses, their causes and how they can relate to the work you are doing according to the anatomical structures involved, from the front of the eye to the back.

Before we even get to the eyeball itself, let's consider the structures around it. The eye sits in a bony socket in the head, protected not only by the bones around it but by the eyelids in front of it and some things that you don't even think about, such as eyelashes, which actually help to protect the eye from things getting into it. You will not see blindness per se caused by disabilities in these protective structures and functions, but where those protections are disrupted you may see secondary blindness. For example, the patient who has a crushing injury to the side of the head may have an eye which is so displaced that he cannot function with it. The person who has a paralysis of his eyelids or who has the fifth cranial nerve destroyed so that the eye is numb, now may have exposure of the eye to the elements and eventually permanent corneal scarring. The patient you see with massive facial disfiguration or the patient, for example, who has severe thyroid disease and develops bulging eyes, can literally go blind from these conditions, from the inability to protect his eyes with the eyelids. These people need, of course, adequate protection - they must not be in environments that are dusty, abnormally cold, too dry. They need to protect themselves and they learn how to do this, but they are not good candidates for some types of occupations.

The first thing you come to in the eye itself is the cornea. It is the clear, watch-crystal-like front surface of the eye. The cornea is as tough as shoe leather; it has a very delicate soft front surface, but the cornea itself is very, very tough, and resists injury; it is also transparent. There are only three tissues in the whole body that are transparent and all three of them are in the eye. The eye acts somewhat like a camera and in order for a good image to be formed in the back of the eye you have to have a transparent, watch-crystal on the front - the transparent cornea. Any disturbance in the corneal structure at all leads to loss of transparency. Even while the cornea still has its integrity it may lose its transparency, and if it's not transparent the patient can't see out.

The most common cause of blindness in the world is trachoma: a viral disease which attacks the cornea. It is uncommon in the United States today; the only places in this country that you see active trachoma at the present time are on our Indian reservations in the southwestern part of the United States and, to some extent, in the northwestern part. We used to have a lot of trachoma in Missouri, Arkansas, Kentucky and Tennessee, through the mountain region there and you still see people who have been blinded by this condition. Trachoma, however, is still the most common cause of blindness in the world, and if you go to the Middle East - to Egypt, Iran or to India, the Philippines, you will see it there. Unfortunately, the patients who have been blinded with corneal scarring due to trachoma do not do well with corneal transplant. Aside from realizing what their problem is, they need very little special protection or care.

Most other conditions affecting the cornea can be treated surgically. You can remove the scarred cornea and replace it with a clear one from a donor eye, and in many, many instances, restore the sight. What limitations do these people have in their activities? In order to deal with somebody who has had successful transplant surgery, or partially successful (which is more likely to be the case), you need to know what has been done. When you do a transplant, you literally cut a circle or disc out of that part of the eye. There is a wound of 360 degrees with sutures around it initially, which later heals in. These patients should avoid anything that might give rise to a severe blow to the eye, that may break open that wound.

These days, we are using a suture for corneal transplant which is fantastically fine. The suture is nylon and only 22 microns in diameter; i.e., 3 times the diameter of one red blood cell. It gives a marvelous wound closure and it is great from the patient's standpoint because there's no reaction to this suture. The eye is not irritated from the surgery and a few days after operation you see a perfectly white eye with a clear graft sitting there. The lack of irritation, however, means the wound heals more slowly. We ordinarily do not remove the suture in less than six months and many times not less than six years. It guards the wound and we leave it in for a long period of time, but immediately after the suture is removed there is a period during which the wound is more likely to rupture. I saw a boy a couple of years ago, who had a suture removed six months after surgery. He was presented at our conference, because when playing he was struck in the eye with a basketball and broke the wound. He should not have been playing basketball, knowing the long time needed to heal a wound of this kind.

A corneal transplant is also done commonly for another condition in which, although the cornea is perfectly clear, it has the wrong shape. In the optical system, that cornea is supposed to be perfectly smooth and round, like the surface of a billiard ball. Some people have corneas which become cone shaped (keratoconus - cone-shaped cornea). Patients with keratoconus tend to have the condition in

both eyes, although not all. They don't see well, and initially we treat them with contact lenses. You put them on top of the cornea and the lens optically takes the place of the cornea. The shape of the front surface of the contact lens determines what the rest of the eye receives in the way of information, so we can substitute a contact lens for somebody's own cornea. If you're nearsighted, you put on a contact lens which is flatter than your own cornea to focus the light properly. The keratoconus patient is actually the person for whom contact lenses were invented away back in 1895. Eventually though, the problem may get so bad that you can't even fit him with a contact lens and, at that point, he may need a corneal transplant.

What about people in general who are wearing contact lenses in recreation? What happens if you get an injury with a contact lens on? Unless the injury consists of a chemical that has been sprayed into the eyes, the best thing to do is to leave the contact lens alone. In general, the contact lens will act as further protection to the eye at the moment. Don't you try to take it out. You may compound the injury with attempts to remove the contact lens. It should be removed by a physician who knows what he's doing, or by somebody else skilled in contact lens work. The contact lenses themselves offer no problems as far as recreational matters are concerned.

There is one special use of contact lenses that we might mention. A patient who has had a cataract removed from one eye cannot use the two eyes together unless somehow they're made to match. One way of matching them is to wear a contact lens on the eye that's been operated on. So you may see some older persons, even in their 80s and 90s, wearing contact lenses after cataract surgery. It provides a much more natural type of vision than the thick cataract glasses.

If you proceed backwards from the cornea, the outer layer or white of the eye is the sclera. You're not going to see blindness from scleral conditions except in the rare situation where the patient with severe arthritis may actually develop thinning of the sclera, and have a section blow out like a patch on a tire. From a recreational standpoint such a person must be protected against any blow to the eye. The sclera becomes so thin that even rubbing the eye firmly might rupture it.

Proceeding into the eye, the next layer is the uvea. The front part of the uvea is the iris; the back part is the choroid. It's all the same layer actually, just different functional parts. The uvea is a syncytium of blood vessels that nourishes the inside of the eye and is a solid network of blood vessels. The iris also has some muscles in it and has the nice property of being able to make the defect of the center of the iris, called the pupil, larger and smaller. If you face a bright light, your pupil becomes smaller and that protects you from the excess light that

would otherwise enter the eye. If you step into a dim room, your pupil dilates instantly to let more light into the eye, to allow you to see better until the retina has a chance to adapt and catch up with the light requirements. You see people after injury especially, but sometimes also with disease, who have trouble with their pupils.

Some patients have no iris either from birth defect or injury. They cannot protect themselves from light and do so badly in light that they develop a condition called nystagmus. Instead of holding still when looking straight ahead at something, the eye moves rapidly back and forth. This occurs synchronously in both eyes and such patients do not see well. Another person who does this, and is somewhat in the same category, is the albino. He has an iris but he has no pigment in the iris; the light goes through it anyway and he also develops nystagmus.

There are other people who are simply born with nystagmus. There is something wrong with the cerebral mechanisms in the brain, and instead of the eyes zeroing in on things and sitting still, they oscillate. These people do not see well especially for distance. Most patients with nystagmus see better near than they do for distance. They hold the reading material practically against their noses and then with one eye turned even a bit closer they may be able to read surprisingly well. Don't let that fool you, for such a person has a severe visual handicap. Even though he can read typewriter or letter size print he is, for all other purposes, legally blind.

The other thing, of course, that can happen to the pupil is that some doctor has the patient on medication that make the pupils small as, for example, in treating glaucoma. When these persons walk from bright sunshine into a dark room, they can no longer see. The pupil doesn't dilate to let more light in and they can't see for a considerable length of time. If these people walk in from the out-of-doors, for example, into a room where there are steps, you must be sure that they stop first before they try those steps. They won't see the steps are there and they'll just walk right off - the first time! You have to watch for sudden changes in the amount of light and help these people when they need it.

Glaucoma is the second leading cause of blindness in adults in the United States and, therefore, is a very important condition. Glaucoma is any condition where the pressure inside the eye becomes too high. There is a system inside the eye which constantly pumps fluid into the eye and constantly drains it out again. If you look at a diagram of the eye you'll see at the edge of the cornea a little hole, an oblong hole, right in the cornea itself. That hole is called Schlemm's canal; it's that canal that drains fluid from the eye.

What kind of blindness does a patient with glaucoma get? In the ordinary type of glaucoma the patient, because of the raised pressure in the eye, loses fibers in the optic nerve and the nerve dies gradually. It's as though, for example, you sit with your legs crossed too long and your foot goes to sleep because of the pressure which you placed on the nerve in the back of the leg. If you get up and stamp around, the foot comes back again completely, but if you were to leave that pressure on too long, that nerve would die and the foot would not come back. The same is true in the eye. If the eye pressure is increased and we find out about it early enough, put the patient on drops or other medication and surgery, if necessary, the vision sometimes may be restored or at least maintained at its current level. The unfortunate part about glaucoma is that if the glaucoma persists too long, the nerve fibers die and there's no recovery. If a patient goes blind from something like cataract, we can always take the cataract out, no matter how many years it has existed, and get back the vision. If one goes blind from glaucoma, it's permanent; you can't fix it. That's why there is all the emphasis placed today on early detection and prevention of blindness from glaucoma.

When a person loses vision from glaucoma, he loses first his peripheral (side) vision. He usually loses his nasal visual field first but doesn't know that because the other eye makes up for it. Then he starts to lose his temporal visual field and he loses it so gradually that he doesn't realize it's going. By the time the person comes and says, "You know, when I walk down the hall I bump into people and doors", they have a visual field of about 30 degrees instead of the 180 degree visual field that one has normally. The glaucoma patient loses his peripheral vision until he finally has only a little central island of vision. These are some of the patients that you may see who are labelled as blind, who have 20/20 vision. I have a man who comes to see me regularly, who will sit down and read 20/20 on the Snellen chart just like that, when he finds the chart in the 2 degree visual field that he has left. He's blind - legally blind. This kind of person presents a much different kind of problem than the person who is blind because he's lost central vision.

The glaucoma patient is the one who, even though he has 20/20 vision, walks like a blind man. How does a blind person walk that's different from a normal person? A normal person leans forward when he walks and leads with his forehead. A person who is blind, walking with or without a cane, tends to lean backwards and lead with his abdomen, so if he runs into something he'll strike it with his tummy and not his head. It's a very different walk and you can pick these people out, even ones who don't realize what's going on. You'll find some of these people assigned to you, especially if you're taking care of elderly people, who don't want to admit that they have a handicap or don't know they have one. You'll see people who are groping their way or being very careful how they step, come to a chair and bump into it first before they

go around it. Obviously they have lost peripheral vision. This common type of glaucoma is called "the thief in the dark" because it sneaks up on you. There's another kind of glaucoma called acute glaucoma but you won't be bothered with that particularly for most people with it don't go blind anymore. It comes on very suddenly, with severe pain, and with a rapid blurring of vision in one eye.

Progressing backwards into the eye, the next structure that you come to is the lens. There's a lens inside the eye just like the lens in a camera. That lens is the second tissue in the body that is transparent and obviously it has to be transparent or the light couldn't get through it back to the retina. It's a marvelous structure, normally crystal clear, but if anything goes wrong with the lens, if the molecules get deranged the least little bit, the first thing that happens is it loses its transparency and it becomes opaque. When the lens loses transparency it's called cataract. Contrary to what people say, cataract is not a growth inside the eye - it's a loss of transparency of the normal lens. Different parts of that lens can lose their transparency; e.g., the front surface, the back surface, the middle, the outer edge - so you get all different types of cataracts. You'll hear all kinds of adjectives applied to cataracts: ripe, unripe, mature, immature, posterior subcapsular, nuclear, cortical, etc. These are just descriptive terms to say where the cataract is in the lens; i.e., where the opaque part is.

A mature cataract, technically, is the lens which is cataractous through and through. The whole lens is cataractous and there are no clear parts left. That used to be very important back in the good old days, 40 years or so ago, when you took out a cataract by ripping off the anterior lens capsule, sweeping out the cataractous parts, leaving some of it behind, and leaving the posterior lens capsule in. And then, unfortunately, about 50% of the patients got after-cataract. Fibers that you left behind regrew across the posterior capsule and produced an opaque membrane, giving you so-called secondary or after-cataract. The interesting thing about that technique is that we're starting to do it again, 40 years later, only we're using a fancier technique. Nowadays we make a little tiny incision, reach inside and clip off the anterior lens capsule. Then we stick a probe in that is connected with ultrasound, emulsify the cataract and then suck it out. The advantage is that you can do your surgery through a very tiny wound, put in one stitch, and, as the New York Times and various other big journals point out, the patient can go home the next day, play golf, etc. A few weeks later the patient gets a contact lens and starts seeing with that eye. These writers also sometimes mention, down toward the end of the article, that about half these people are going to have to go back for another operation for the secondary cataracts. That's not due to faulty technique at all and is a relatively minor operation. This technique is being used more and more in this country though it has a bad reputation unfortunately among ophthalmologists because it

was forced upon us by the company that manufactures and profits from the sale of the ultrasound machines. We thought this was unscientific and wanted to see the technique proven to be safe before we used it, but we weren't given that opportunity. We were forced into using this technique even before it was shown to be safe because otherwise the patients went to someone who would do it. Patients just don't inquire if an operative technique is safe or not because the newspapers say it's wonderful.

In ordinary cataract procedures today, we try very carefully to remove the entire lens all in one piece. To do that you need a larger incision, big enough to get that lens out, and you have to use more sutures. The patient still gets up the next day and can go home on the second post-operative day. Cataract surgery is even being done as an out-patient procedure in a few centers. In any event, having taken the lens out, you have a camera without a lens and the focus and vision are terrible. If you have a patient who has a mature cataract and take the lens out, he can see albeit terribly. He doesn't care how terrible it is for he remembers how awful it used to be, is overjoyed and thinks his present state is marvelous. "By George, I came in, I couldn't see anything and now I see doors and windows, and I can see the doctor come through the door." They really see very poorly at that point and you have to give them a lens to take the place of the lens you've taken out.

Nowadays there are three ways to restore the lens system. You can put on the thick cataract glasses that you see on older people, which give you 20/20 vision, but not 20/20 like you had before. This glass magnifies things, makes them one-third bigger, one-third closer than they were before, but it distorts. If you look through the side of the cataract lens at the edge of the wall, the wall bows inward. As you move your head to the other side, the wall bows in the other direction. That's O.K. if you're sitting down, but it's a little disconcerting when you're standing up to have a bunch of bowing doors, etc. You can even put up with that, but what you can't put up with is trying to walk, because as you move your head through space, all the straight lines wave back and forth. The amazing thing is that people can walk at all but that marvelous apparatus connected to the eye called "the brain", even in elderly people, has a marvelous ability to adapt. The brain says, "Straight lines don't wave", and it straightens the lines back up after a little while. The brain does that, not the glasses. The other thing that happens is that you can't see clearly beyond the glasses; everything is really out of focus. As a matter of fact, you don't even see clearly through the side of them because there's so much edge distortion in the glass. The patient tells you that he has lost peripheral field and doesn't see to the sides. He hasn't lost any peripheral field for if you actually measure the field it's all there, but he doesn't see it clearly. When he wants to back up his car, or for some other reason, recreational perhaps, he looks

around to see what's going on behind him, he doesn't see it. If he wants to see clearly, he has to turn his head all the way around and look through the center of the glasses. He used to see clearly just by turning his eyes but now he must turn his head. When he walks, especially if he is an older person and a little feeble, instead of striding out he will sort of hobble along, feel his way. He's not sure where the real world is and this lack of security is sometimes very hard on older people.

How long does it take to get accustomed to the cataract glasses? That depends on the age of the patient and how bad the vision was before. If you operate on an elderly person with reasonably good vision, e.g., somebody with 20/40 vision who twists your arm and says, "I've got to have the cataracts removed", the patient will be bitterly disappointed, very unhappy. Oh, sure, they can see the figures in the account book now and that's why they had the cataracts removed, but they can't walk and the whole world is distorted. If you want to start a practice in a small town and make it big, here's what you do. You operate on the mayor's mother who's blind in both eyes from mature cataracts, has to be led around, can't see hand motion if she tries. You take off her cataracts and the day after surgery on the second eye, you take the bandages off, put a pair of plus ten glasses on her and her face lights up. You step aside and she gets up and out of bed and walks right off! She doesn't have a bit of trouble navigating and she thinks it's marvelous for she can see so much better than she did before. She has no trouble adapting whatsoever and even though she's 87 years old, she walks right down the hall, practically skipping. It makes a difference who you're dealing with how fast they adapt. Younger people adapt faster than older people to everything and people whose visual acuity has been greatly improved are so overjoyed that they forget about the distortion. Some people never adapt to cataract glasses and are miserable forever but these people tend never to adapt to anything else either.

The second way you can put the eye in focus is with a contact lens. Contact lenses have the advantage that they restore the vision without the loss of the side vision. They have the disadvantage that many arthritic elderly people cannot even pick one up off the table, much less put it in their eye. Furthermore, a lot of people aren't going to mess with them.

The third way of correction is to implant a plastic lens in the eye after cataract surgery. The Europeans have been experimenting with this for a number of years and now have ways of doing it that are not disastrous. Now, surgeons in the United States are beginning to implant a plastic lens inside the eye at the time of cataract surgery or even later, which gives the patient close to natural vision.

In congenital cataracts the operation is essentially the same but you never remove the lens in the capsule. You always open the

anterior lens capsule and suck the lens out or stir it up. If you look at a diagram of the eye you'll see some threadlike things to either side of the lens like a mass of tent strings. That's called the zonula and it holds the lens in place. In an infant that is so tough you'll never break it and the problem of getting the lens out in one piece is so horrendous that it's too difficult to try. Post-operatively the patient with congenital cataracts adapts right off. If the congenital cataract patient has cataracts in both eyes and is operated on fairly early, he will use both eyes together. The real problems are with the patient who had a lot of congenital cataract in one eye and a moderate amount in the other. He may never learn to use both eyes together as vision is something that you learn. You're not born with it. You're born with the ability to see light and dark and motion but that's all; everything else is learned. If an eye is not given the opportunity to learn adequately, as in a child with a congenital cataract, or if eyes are crossed so the patient mentally suppresses the image in that eye to keep from seeing double, if it's out of focus for some reason - then that eye will not learn how to see. It's hard to teach old dogs new tricks and vision is very difficult or impossible to learn later in life. If you can get these children early enough, occlude the good eye and give them correction in the other eye, this permits them to focus and forces them to learn.

Going back further in the eye, there's a large space that's filled with vitreous which is a transparent jellylike substance. Patients who go blind because of hemorrhages in that space are mostly patients with diabetes. Diabetes is rapidly becoming the chief cause of blindness in adults in the United States. This may be because we have more and more people with diabetes who survive into older age. Diabetes basically affects the retina which is the next layer back. It's a gossamer thin layer that corresponds to the film in the camera. Like the film in the camera it's what actually receives the image and translates it, in this case, into nerve impulses that go up the optic nerve to the brain.

All kinds of things can happen to the retina for it's a very delicate structure - diabetes, hemorrhages, retinal detachment where the retina simply comes loose. The retina just sits there; it's not nailed down and if it gets a hole in it, the vitreous percolates underneath, the retina floats free in the eye and it no longer sees. One out of three people with retinal detachment in one eye gets it in the other eye. These days the patient that has retinal detachment has an 85% chance of getting a good visual result with retinal detachment surgery.

This is where you hear about lasers. Everyone wants to fix cataracts with lasers. You can cause cataracts with lasers but you can't fix them. You can use lasers and other fancy techniques to tack retinas back, weld them back with spots but even where

the retina is successfully welded back in place your successful retinal detachment patient may not see well. He's lost a lot of his peripheral vision because that's where all the welding was done and he may have lost central vision besides.

Now, what can he do for recreation? Well, he doesn't take up boxing, doesn't fire a shot gun, doesn't run an air hammer or do anything that would give rise to sudden acceleration to the eye either directly or indirectly. We don't want to shake that retina free again and we especially don't want to shake free the one in the other eye so we're a little restrictive as to what we let retinal detachment patients do.

However, we're not as restrictive as we used to be. Formerly the patient with retinal detachment went to the hospital, laid in bed for two or three weeks with his head held by sand bags first for the retina to settle back, then after you operated he went back into sand bags for another six weeks or two months. In the meantime you hoped he didn't die of pneumonia or the other problems people have when you immobilize them. These days the patient is up in a couple of days, goes home soon after and resumes ordinary normal activities, avoiding blows to the head.

From the standpoint of recreation, he's not to engage in contact sports and this also includes activities like trampoline, gymnastics, diving, etc. In gymnastics and calisthenics many people, exerting maximum effort, hold their breath. If you hold your breath and exhale against a closed glottis, you raise the pressure in your chest considerably. It gives a feeling of great strength to do that; but when you raise the pressure in your chest, you raise the systemic blood pressure, especially the venous blood pressure, and that increased pressure is immediately transferred to the head. It's that increased pressure that gives you the feeling of greatness and accomplishment but it also goes straight to the eye. Closing the glottis, then forcibly exhaling, straining against the closed glottis, is called the Valsalva maneuver and these maneuvers are contraindicated in anyone who has any kind of an eye wound, especially one that's recently healing, because they can break the wound open. Strenuous activity of this sort even though it's done very slowly and deliberately is contraindicated in people with retinal detachments and perhaps with hemorrhagic disorders of the eye. If you can really trust the patient to breathe as he does the exercise and not hold his breath, it might be O.K., but for the average person it's not such a good idea. You must think of this with respect to many activities including such things as blowing up balloons. Don't let the patient blow up balloons. Let somebody else blow up the balloons at the party and let your patient hand them out.

How about the young person who is involved in athletics and sports? I have a young man right now who's had a retinal detachment and is in this predicament. He comes to me and says, "I'd like to get

back on the wrestling team." This means his whole life to him just now - the question is should he, or should he not, go back on the wrestling team? Mother says, "I wish my boy didn't wrestle." My approach to mother is, "Look, it's exceedingly important to the rehabilitation of this kid that he be put back into the normal world as far as possible, to do all the things that normal kids do, that he's not ostracized, that he not be somebody special, that he be one of the gang." As far as any specific activities are concerned, we have to weigh the risk to his eyes if he participates against the sociological problems of not doing so. In most cases, especially if we can teach him not to hold his breath and if he wears a face mask so he doesn't get an elbow in the eye, wrestling may be O.K. but boxing is out and we have to be careful about diving. Let him swim, dive off the edge of the pool but not off the three meter board. Let the other guy dive off the three meter board and let your patient race him to the other end. In certain delicate cases underwater swimming might be out, but in swimming underwater you don't usually exhale forcibly. What you have to do in some of these things is to ask the person's ophthalmologist if a specific activity is O.K. It's hard to set down hard-and-fast guidelines that you can apply to everybody. It will vary from one patient to the other and unfortunately, it will also vary with how conservative that ophthalmologist is.

The other type of retinal disability that causes blindness in certain people is retinitis pigmentosa. It's a hereditary condition involving the area just under the retina and results in loss of peripheral vision with a very peculiar pattern. The first loss that these people notice is the loss of night vision and they are greatly handicapped in a new and different environment. They do all right early in the game but later wind up with a very small field and blurred vision.

We talk about people who have difficulty adapting to different levels of light. The retinitis pigmentosa patient can't see in the dark. The patient with a small pupil, as in glaucoma, has difficulty adjusting to darkness when he first comes into it. The patient with cataract has difficulty oftentimes with light, especially when the light is coming from the front. The light strikes the cataract, is scattered into the eye and all the person sees is a big glare. He has great difficulty when he steps out of a room into the bright out-of-doors where he's blinded for a bit. As a matter of fact, all of the people in this room who are beginning to get grey hair, like me, with this lovely fluorescent illumination which we have here, will do much better if they shade their eyes from the direct glare of those overhead lights. So, when your little old lady comes to the card game with her green eye shade on, she is being very, very smart, as it really helps. Some of these people complain bitterly about the fluorescent lighting which is so common in buildings these days. What they're really complaining about is the glare of this light

striking their lenses so just get them a baseball cap, a sun bonnet or something like that, and they'll do much better. The patient that we see who has great difficulty with light adaptation is the person who has a central cataract. He's fine as long as he doesn't face a light. For example, he's driving along and everything is fine until another car's headlights come toward him. He looks at the headlights, his pupils constrict, and now the cataract which only partially blocked his vision, completely blocks it, and he can't see anything. He's a menace driving at night.

The other big group of people that are legally blind are those that have lost central vision. Macular degeneration is a common condition in older people especially, but is sometimes seen in children as well. The central part of the retina is very, very sensitive to various toxins and you may lose a little area, about 3 to 5 degrees in size, right in the middle. That's the part of the retina that you use to read. If I want to see you clearly, I must look directly at you. If I look at the man sitting next to you, I can still see you but I don't see you clearly. When a person with macular degeneration looks right at you, he doesn't see you at all for he has a blind spot. If he looks to the side of you, he can see you but he can't recognize you because side vision is not clear. He may have 20/200 vision, be unable to read, be legally blind but his walking-around vision, his side vision, is perfectly normal. This is a different kind of situation and one that you find especially with elderly people. These people are legally blind and though some of them don't know the legal blindness part of it, they know that they're having trouble with detailed vision. If you're trying to help them with a crossword puzzle, forget it, for you need something grosser than that. Chess is fine, but crossword puzzles are out.

There are a number of things that can damage the optic nerve and cause a loss of transmission in that area. You can also have loss of vision from damage to the brain itself. As far as the impact of the latter upon recreational activities, remember that in most instances, damage to the brain occurs on one side of the brain rather than on both sides, and your vision, as far as the brain is concerned, is divided right down the middle. The left side of my vision in both of my eyes is on the right side of my brain and, if I had a stroke involving the right side of my brain, I could lose the vision on the left side, and vice versa. You have to watch out for the person that's had a stroke for he may see nothing on one side, have lost half of his visual field but he doesn't know it, doesn't realize it's gone. He should not drive an automobile for if a child steps into his path from his blind side, he won't see him. He should be absolutely forbidden to drive, at least for quite a while anyway, until he gains knowledge about his loss. He may have trouble in walking about and he'd have difficulty obviously in certain sports if he's lost half the visual field that he doesn't realize is gone. If he's lost the left side, when he reads, he comes across the line O.K. but he can't find his

way back to the beginning of the next line. He doesn't know why; he just knows that he can't find his way. If he's lost the right hand side, he can find his way back to the beginning but when he starts back across the line he can't find the next word. He's groping for it, he stumbles down the line and again he doesn't know why.

These are the common visual problems that you will encounter in your work, the common conditions which cause visual loss and the factors which affect how well a person sees and how well he adapts.

I hope that my remarks have been of assistance to you. There are several good books on eyes and vision in general but, unfortunately, they do not address your problems.

SUMMARY OF DISCUSSIONS AND RECOMMENDATIONS

In the respective discussion groups, participants focused attention upon outlining suggested content and developing guidelines for integrating material into on-going recreation course work in order to prepare personnel to meet the recreation and leisure time needs of blind and visually impaired persons of different age groups. Outlines of course materials developed by the respective groups are included in Appendix A.

Group I addressed itself to discussion of normal growth and development; how it relates to recreation and to children with visual disabilities. There was general agreement within the group that in therapeutic recreation course work more emphasis should be placed on total development of the child and on recreation programming for the early childhood years. The needs of visually impaired children as they relate to recreation differ only in degree from those of sighted children, and greater opportunities for participation of children of preschool (0-6) age in experiential activities should be provided for all children. Recreation personnel should start to work with children in the community at a younger age.

Group II delineated the kinds of competencies general recreation personnel conducting programs in municipal and public recreation agencies needed in order to achieve the goal of integrating youth and young adults into existing on-going community recreation programs. In developing the list of competencies, participants considered both the content of existing undergraduate level courses for training recreation leaders and the questions that students ask; e.g., What is it like to be blind? What techniques are used to adapt? What are the safety concerns? What are the teaching differences?

Group III focused its discussion upon meeting the needs of visually impaired and blind persons age 55 and over. The members discussed characteristics of the population to be served, their personal management, social-psychological needs, and contributions of leisure service in meeting needs in relation to life style of older persons.

It was noted in each of the groups and in the general discussion which followed that there was need for expanding and delineating with more specificity the sub-categories in the outlines developed. The competencies, learning experiences and resources available needed to be added and having been developed separately, the three outlines needed to be reviewed together.

It was pointed out that in addition, there was need for identifying specific objectives and developing appropriate measuring devices. Attitude scales such as "Opinions About Blindness" copyright 1966, Jerome Siller, Ph.D., New York University and film discussion guides were mentioned as possible evaluation tools.

It was suggested that organization and expansion of the outlines be done by persons with expertise in specific areas; e.g. client assessment by specialists in blindness, activity analysis by recreation personnel. A small group or committee might then organize, synthesize and draw together in a logical sequential fashion information already available, suggest teaching strategies and learning experiences, and package these into units and information kits.

Participants were in agreement that in all probability no more than 3 to 6 hours could be devoted to aspects of blindness and visual losses within the context of an introductory course in therapeutic recreation. Good informational materials are available which, if organized, packaged and distributed to therapeutic recreation educators, could be readily integrated into an introductory or other course already offered in their curricula.

It was recommended that key personnel in a selected number of colleges and universities, (20-30 including those represented at the workshop) be provided packets of available materials, copies of the outlines developed at the workshop and in an AFB-NTRS cover letter requested to cooperate, on an experimental basis, in integrating the material into on-going course work of curricula during the ensuing academic year. Following this trial, it was recommended that the group of educators participating in the experiment be brought together at an evaluation workshop to share experiences, results, refine outlines and develop further guidelines for use of general recreation educators.

It was further suggested that a glossary of terms, listings of available films, sources of information and resources that could be utilized in the provision of classroom instruction be distributed; copies of the films shown and video tapes recorded at the meeting be circulated to participating educators for use in their curricula. It was recommended that additional video tapes be made for use in situations where appropriate local lecturers were not available. A video taped lecture on medical aspects of common types of visual loss, causes, care and considerations in recreational activities (similar to the material presented at the workshop, but expanded to include discussion of younger age groups) and an instructional tape demonstrating human guide techniques were identified as being of highest priority.

It was suggested that (1) consideration be given to future filming of blind and visually impaired persons of different age groups engaging in leisure time activities. If opportunities were not available for direct observation, such tapes could be utilized in the classroom for activity analysis; (2) in lieu of a consumer or consumers discussing with a class their interests, experiences, reactions, etc., a video taped interview would be useful.

It was also suggested that (1) a booklet or manual with templates and/or overlays that would portray graphically the fields of vision and common limitations; e.g. tunnel vision, loss of central vision and (2) sleep masks and Halloween masks adapted to simulate a variety of visual losses would be valuable teaching aids. In discussion of the usefulness of such devices, however, persons in the group warned against focusing too much attention upon visual losses, and urged that in presenting available information, the positive approach be used emphasizing abilities and the functional use of residual vision rather than the disabilities imposed by visual impairments.

It was pointed out that in addition to inclusion of information about vision in therapeutic recreation classroom courses, opportunities should be provided for experiential learning in observation practicum, field involvement and internships. Awareness of how vision is used should also be maintained in other courses; e.g. facilities design, program planning. It was suggested that consideration be given to the development of a series of informational packets for use in such courses.

Ways of reaching practicing general recreation personnel were discussed and it was recommended that fact sheets be developed containing information that municipal recreators could relate immediately to their own environments; e.g. "Considerations in Architectural Design", pointing out that there are few, if any, actual architectural barriers. It was suggested that consideration of acoustics, contrasting colors, raised letters, etc., would be welcomed by municipal recreators. A guide with suggestions for integrating blind and visually impaired persons into on-going programs, which included information that would allay fears about legal liability, would also be of immediate interest to community recreators.

Other suggestions included: (1) presenting information at state therapeutic recreation society meetings, (2) mailing packets of material to state therapeutic recreation consultants, (3) enlisting the assistance of the Society of Park and Recreation Educators in dissemination of material and (4) presentation of information at the National Recreation and Park Association Congress meeting. There was general agreement that these were all practical and feasible ways of increasing awareness and understanding of needs and abilities of blind persons and expanding opportunities for their participation in community recreation programs.

MEETING NEEDS OF YOUNG CHILDREN WITH VISUAL IMPAIRMENT

Suggested Content

I. Population

Preschool child (0-6 years old)

Needs of all children and of visually impaired vary only in degree.

II. Human Growth and Development

A. Psychosocial

B. Cognitive

C. Affective

D. Psychomotor

III. Recreation

A. Relation of recreation activities to developmental processes and sequences.

B. Utilization of recreation for developmental assessment and identification. (play in a diagnostic role)

C. Selection of activities related to assessed needs and stated objectives.

D. Placement in relation to assessed status.

E. Evaluation and assessment.

F. Utilization of community resources.

IV. Visual Disabilities

A. Relate the degree of vision loss to growth and development

B. Relate the age of onset of visual impairment to the process of growth and development.

- C. Relate the degree and type of visual impairment to the recreation activity.
- D. Relation of visual and other medical aspects to recreation activities.
- E. Adaptation of activities in relation to visual disability.
- F. Leadership techniques in relation to visual disabilities.
- G. Consultation with the family and organizations, liaison with other community organizations that could be of assistance.
- H. Leisure education of visually impaired persons and their families.
- I. Preventive safety in relation to recreation activities.

MEETING NEEDS OF YOUTH WITH VISUAL IMPAIRMENT

Suggested Content

I. Population Identification

A. Location

1. Students in residential schools
2. Students in public school

B. Age of Onset

1. Congenitally blind
2. Newly blinded

C. Degree of Disability

1. Totally blind
2. Partially sighted
3. Multiply handicapped (will be concern of the TR Specialist first because of growth of special programs)

II. Community Resources for Recreation Services

Recreation Leaders

All students in recreation training programs in colleges and universities across the country

III. Role Functioning and Skill Level of Recreation Leader

IV. Competencies for Performing Role

- ##### A. Knowledge of Blindness - Similarities and dissimilarities of congenital and adventitious blindness as it relates to activity involvement
1. Definitions
 2. Etiologies
 3. Incidence and prevalence
 4. Psycho-social implications
 5. Historical and current perspectives

B. Basic Skills

1. Sighted guide techniques
2. Environmental orientation
3. Protective techniques
4. Activities of daily living
5. Sensory training

C. Client Assessment

1. Mobility skills) enough to ascertain limitations,
2. Sensory skills) safety factors and help the person
3. Interests

D. Resources - Knowledge of national, state and local resources; e.g. activities, total services and techniques for working with the blind

1. Organizations
2. Written and audio-visual materials
3. Individual expertise within own community
4. Equipment available

V. Activity Analysis and Adaptation

- A. Ability to analyze activities in relation to function and/or disfunction.
- B. Ability to adapt activities so person can participate successfully.

VI. Program Leadership and Management

- A. Analyze teaching or leading technique and adapt to the blind person i.e. communications
- B. Facilitate the entry of the blind person into the activity--assess his participation and adapt and modify activity if and when needed.
- C. Communicate and interpret to the other participants how they can assist the blind person in total participation.

VII. Evaluation

Assessment and appropriate revision.

MEETING NEEDS OF OLDER PERSONS WITH VISUAL IMPAIRMENT

Suggested Content

I. Population Served

Visually impaired (handicapped) and blind, employed and retired older Americans, age 55 and over.

A. Currently excluded in the community

1. Institutionalized
2. Homebound

B. Reasonably functional in the community

II. Characteristics

A. Medical and Health Status

1. Loss of vision in this age group
2. Functional aspects of visual impairment
3. Other disabilities associated with aging
4. General nutritional status

B. Social-Psychological Aspects

1. Twenty losses based on Carroll's book
2. Social attitudes toward
 - a. Blindness
 - b. Aging
 - c. Other disabilities of older persons
3. Ethnic and cultural factors in relation to attitudes and beliefs
 - a. Aging
 - b. Blindness
 - c. Leisure
 - d. Work

III. Contributives of Leisure Service in Meeting Needs in Relation to the Life Style of Older Persons

A. Personal Management Needs

1. Techniques of Daily Living (How Recreation Can Help)
 - a. Eating skills
 - b. Grooming skills
 - c. Personal hygiene
 - d. Handling money, etc.
 - e. Identification of further needs of the individual
2. Mobility Skills
 - a. Human guide skills
 - (1) Recreation staff must learn
 - (2) Teach volunteers and staff
 - b. Orientation to the area
 - (1) Living setting
 - (2) Activity environments
 - c. Transportation
System development and provision
3. Communication Skills
 - a. Handwriting or written skills
Aides and devices
 - b. Spoken communication
 - (1) Facial expression when speaking
 - (2) Tone of voice
 - (3) Direction of speaking
 - c. Non-verbal communication
Body "language"
 - d. Information
 - (1) Talking book radio
 - (2) Talking books
 - (3) Reading current publications
 - (4) Discussion of current events
4. Leader-Participant Communication Skills

Approaches to the helping relationship

B. Social-Psychological

1. Changing attitudes of staff and volunteers toward accepting the visually handicapped
2. Preparing participants to accept visually handicapped
3. Motivate visually handicapped to participate
 - a. Counseling for family and/or individual
 - b. Fit program to client, not client to program
 - c. Expectations of staff and client
 - d. Provide recreation skill evaluation and development
 - e. Involve program participant in planning process
 - f. Meaningful and/or useful, rewarding activity
 - (1) specific needs of the individual
 - (2) value to the person
 - g. Return to activities he or she did prior to losing sight
4. Value of transfer from recreation to other areas
 - a. Gaining confidence and self-esteem
 - b. Growing toward independence
 - c. Gaining social adequacy
 - d. Developing confidence in use of remaining senses
 - e. Providing reality contact with environment
5. Continue the normal life style to the ultimate degree possible

Do not segregate blind aging from others
in separate programs

IV. Considerations for Program Planning

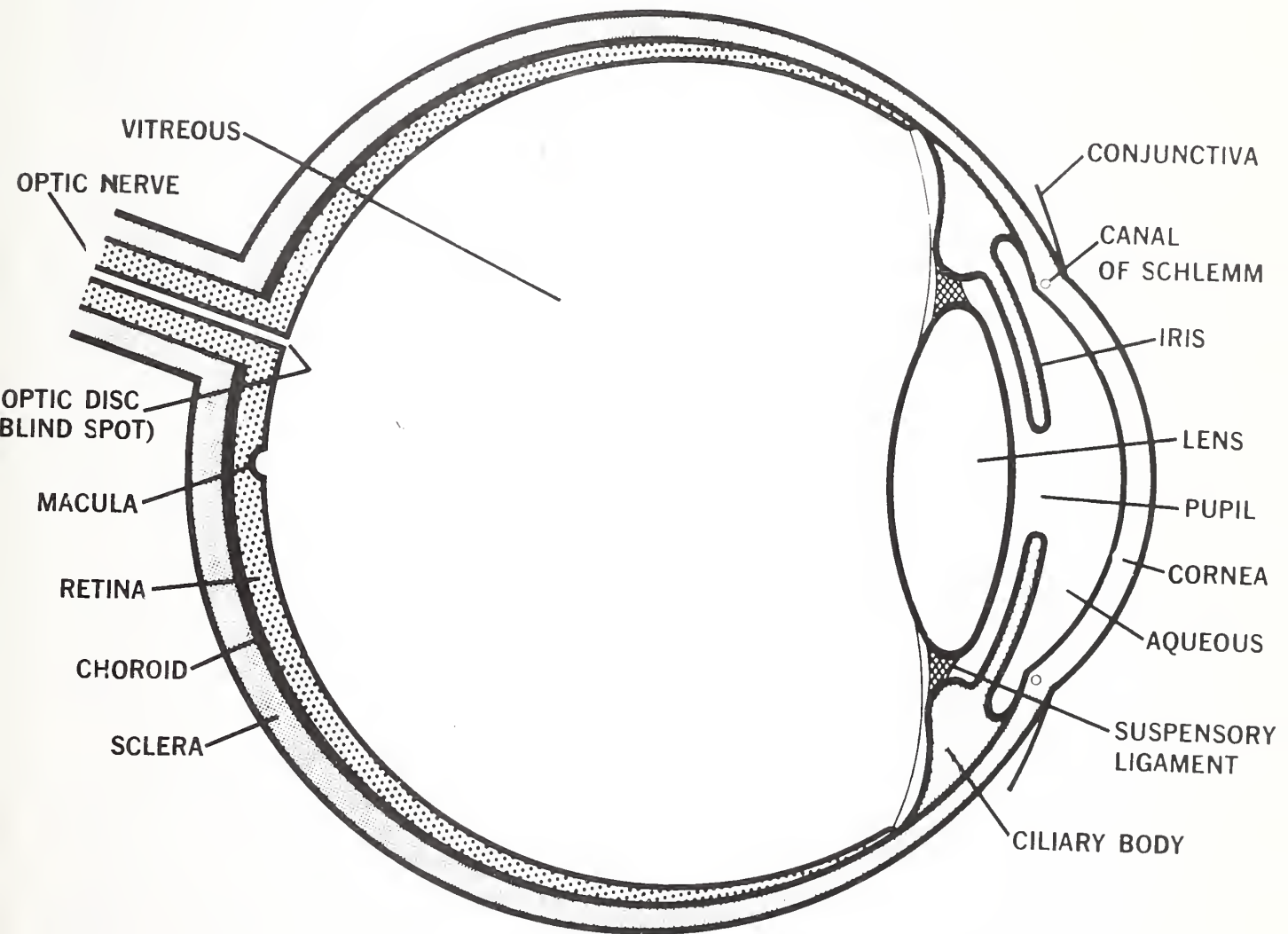
A. Functional Evaluation Procedures

1. Limitations
2. Competencies

B. Medical Considerations and Contraindications

- C. Assessment of Social, Psychological and Environmental Factors
 - 1. Circumstances of residence
 - 2. Intellectual and academic status
 - 3. Interests
 - 4. Financial resources
- D. Obtain and/or Design Necessary Devices or Techniques
- E. Knowledge of the Demands of Activities

Cross Section of the Eye



Description of Films

Available from American Foundation for the Blind, Public Education Division, 15 West Sixteenth Street, New York, New York 10011.

NOT WITHOUT SIGHT (1973)

19½ minutes, 16 mm color

Rental \$14.50 per screening, plus \$4.50 service charge
(purchase price \$120.00)

This film defines the major types of severe visual impairments, examines their causes and illustrates how those with visual impairments function. It was produced to answer the need expressed by those in the field of blindness for a film which might help to dispel some of the stereotyped thinking sighted people have about blindness and other forms of severe visual impairments.

The film depicts the sight of people with severe visual impairments as they 'see' the world around them. Five impairments are presented; glaucoma, cataracts, macular degeneration, retinitis pigmentosa, and diabetic retinopathy. These are the major causes of blindness in this country today and they illustrate the three primary ways in which vision can be impaired: one, where the over-all vision is obscured, two, where the edges of vision or parts of vision are obscured, and three, where the center of vision is obscured.

WHAT DO YOU DO WHEN YOU SEE A BLIND PERSON? (1971)

13½ minutes, 16 mm color

Rental \$7.50 per screening, plus \$4.50 service charge
(purchase price \$90.00)

What Do You Do When You See a Blind Person? is both the title and a question asked of sighted people in this short film. It deals lightly with a serious problem; demonstrates the right and wrong way of dealing with blind people in various situations.

The film shows Phil, a well-meaning but ill-informed character, who meets his first blind person, Jim, on a busy New York street corner. During the film, Phil faces what are monumental problems for him--problems like walking, talking and dining with Jim. With the help of the narrator, and some cinematic tricks, Phil soon learns that most of his "problems" can be eliminated by applying common sense. Phil also clears up some misconceptions he had about blind people.

The narrator shows Phil the proper way to help Jim across the street, how to lead a blind person up steps, how to walk with him. Phil discovers that Jim works for a living, and that he can be free to use words like "look" and "see". Phil and Jim arrange a luncheon date, during which Phil learns how blind people locate articles on the table, and he, in turn, shows a waiter how to talk directly to blind people.

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